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ABSTRACT

Information is presented concerning the European Association for Research and Development in Higher Education (EARDHE) and educational research and development occurring at the universities in the Netherlands. Additionally, perspectives on how university teachers in Hamburg, Germany, can improve their teaching methods are considered. The goals and past activities of EARDHE, its history, and future direction in terms of international conferences, seminars and workshops, reports on research and development in European education, and its international directory of research and development workers in higher education are described in an article by Ulrich Peter Ritter. A. I. Vroeijenstijn discusses educational research and development at the universities in the Netherlands and outlines the function of the centres for Research into and Development of University Education (R.W.O.-centres). The primary task of the R.W.O.-centres, which are the responsibility of the separate universities, is focused on the teaching field. Activities include evaluation of aspects of the educational system (e.g., evaluation of lectures, tutorship), testing problems, and statistical analyses of student data (e.g., student retention). The functions of the Association for Research and Development in Higher Education in the Netherlands, the Central Bureau for Research into University Education, the Working Community (Werkgemeenschap), and relationships among the agencies and with the government are addressed. Activities at 10 universities in the Netherlands are outlined. The situation in West Germany with regard to training for university teachers is addressed by Ludwig Huber. Information on the Institute for Education Technology at the University of Surrey in England is included. (SW)

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EARDHE

EUROPEAN ASSOCIATION FOR RESEARCH AND DEVELOPMENT IN HIGHER EDUCATION

REPORT ON RESEARCH AND DEVELOPMENT IN EUROPEAN HIGHER EDUCATION

THE NETHERLANDS

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March 1981

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In co-operation with: the Association for Research and Development in Higher Education in the Netherlands (C.R.W.O.)

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Off to a new Start

In May 1980 the EARDHE Executive Committee met in Rissen to discuss the future of our Association. Declining membership and a precious financial situation were obvious indicators for the necessity to evaluate the past and to decide on the course for the future. One thing was clear: EARDHE would not survive as an Association if it were just to organize a conference every two or three years. So the alternatives were either to find some other way to get such conferences organized or to really get EARDHE on the go as an organization which gives its' members adequate service up and above conferences. After a very careful study of the needs for such an organization the EC agreed that it would be very valuable and worth our efforts if we put EARDHE on a sound basis. All members of the EC agreed to personally do all in their power to contribute to a new programme. In this situation it was both a pleasure and an honour for me to be asked to take over the presidency from Edmund van Trotsenburg who so aptly had organized the Klagenfurt Conference in 1979.

The programme will be described in other parts of this Report. The Report on Research and Development in European Higher Education is one of the pillars on which the network rests, which EARDHE hopes to foster and establish. I hope it will be successful and useful to both research and researchers and development and developpers in higher education and I want to thank the Association for Research and Development in Higher Education in the Netherlands (C.H.W.O.) that they agreed to take over the responsibility for the first issue, and the Central Bureau of Research into University Education (C.B.O.W.O.) and the Interfaculty Working-Group of Educational Research at the Erasmus University Rotterdam for doing the job.

Frankfurt, September 1980

Ulrich Peter Ritter

THE EUROPEAN ASSOCIATION FOR RESEARCH AND DEVELOPMENT IN HIGHER EDUCATION

(E A R D H E)

History - Goals - Present and Future Activities

by Ulrich Peter Ritter

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1. Goals and past activities

According to the statutes, the general aims of EARDHE are:

- to promote eductional research and development in higher education
- to encourage scholarly examiniation of phenomena and problems related to higher education
- to contribute to rational decision making about the aims, structures, curricula, teaching and evaluation, taking into account social and cultural changes and demands.

In the past the principal instruments for reaching these aims have been international conferences and workshops and other measures to foster co-operation among researchers and institutions in various parts of Europe. Three such conferences were held in the past, the first one in Rotterdam in 1973, the second in Louvain-la-Neuve, Belgium in 1976 and the third one in Klagenfurt, Austria in 1979. The fourth presently being prepared for the fall of 1983 in Frankfurt. Aside from these conferences EARDHE has sponsored or co-sponsored workshops and seminars on a variety of topics. It has thus achieved the establishment of contacts and co-operation among researchers in the different regions and institutions of Europe and among Europeans and the rest of the world.

2. History

EARDHE was founded in May, 1972 in Strasbourg, France under the auspices of a committee of experts and researchers in the field of higher education. Since that date its conferences have become the

principal meeting place for researchers from all over Europe as well was from all other parts of the world, who are interested in European research and development in the field of higher education. It has established contact with researchrs and centres for research and development in the field of higher education. It has established contacts with researchers and centres for research and development in the socialist countries, one of the members of the present executive committee being from Yugoslavia. Furthermore EARDHE concluded "treaties of co-operation" with many institutes and national associations in Europe and abroad such as CEPES (European Centre of Higher Education) in Bucharest, SRHE in Great Britain, the OGHD in Austria, HERDSA in Australia, VOR in the Netherlands, the AHD in Germany and many others. Inspite of the success of EARDHE the society went through a crisis in the years 1979/80, which led to reconsidering the necessity and usefulness of the Association and the chances of keeping it functioning in times of an abundance of national and international conferences on the one hand and increasing scarceness of fund on the other.

In May 1980 the executive committee met in Hamburg to analyse the situation of EARDHE and elaborate proposals for the future. Those considerations started from two assumptions, one being that there was no adequate return for EARDHE membership at that time, as all it had to offer was a conference every three to five years, on the other that increasing the number of conferences and seminars would not be an adequate measure, given the large number of both national and international conferences.

On the other hand that idea of dissolving EARDHE and maybe replacing it by a European conference secretariats supported by the national associations was not considered advisable. Maybe EARDHE fulfilled one of its most important functions by establishing contact among those working and interested in research and development in European higher education thus fostering many a co-operation and project across national boundaries. It has also made possible many an act of international solidarity when institutions or persons working in the field were endangered. But these tasks are never over. They need

renewed efforts and a well functioning network particularly in times as difficult for our work as those which we are about to enter. Also the number, scope and seriousness of questions and problems on which we have to work, is far from decreasing. On the contrary, each day presents us with new problems and leads us to discard or doubt our solutions to older problems.

The executive committee therefore decided to make the effort of reinvigorating EARDHE and to elaborate a programme of activities destined to serve an increasing number of members. To implement this programme the author was elected president, each of the members of the executive committee taking the responsibility for one or more of the activities planned for 1981 to 1983. Finally, in July 1980 the general assembly approved the programme and authorized the executive committee to renegotiate the treaties of co-operation with national associations and institutions.

3. The future of EARDHE: Programme and Acitivities

The futrure of EARDHE will revolve around a wide spectrum of activities destined not only to meet one particular need but rather mutual and differentiated needs of a larger membership. The programme for 1981 - 1983 includes the following activities:

3.1. International conferences

Rather than increasing the number of conferences EARDHE will stick to its tradition of having conferences in larger intervals averaging three years and being prepared very carefully. The next conference will take place in the first week of September 1983 in the Johann Wolfgang Goethe-University, Frankfurt, Germany. It will deal with the present and future problems and development of society and analyse their consequences for higher education. Trends will be analysed, perspectives will be explored and alternatives developed for the three large areas:

- existence of and changes in institutions of higher education
- the state of science and research and of the various disciplines, old and new
- changes in teaching and learning.

The exploration of these themes and the specification of the tasks and papers for the conference will be a process in which experts from all fields will be involved. This process will be co-ordinated by the author of this article.

3.2. Seminars and workshops

EARDHE will sponsor seminars on specific topics such as the theoretical basis of educational planning, evaluation and innovation, etc. For 1981 Cor van der Klauw is planning a seminar for research workers dealing with theories of and approaches to course evaluation and curriculum design and evaluation. This seminar will take place in Rotterdam, while the next one will be in Scandinavia. Lennart Levin will plan a seminar for 1982, probably on the theme of student learning. Also for 1983 Brigitte Behrendt is preparing the third workshop on staff development, it will also offer international workshops where experts will train teachers of higher education in various fields. The first such activity is planned for 1981 and will be prepared by David Piper.

3.3. Reports on Research and Development in European Education

This review covers developments, activities and research projects in European countries as well as international news. Each year four to six issues will appear, the first ones being country reports; later issues will be dedicated to specific topics, which will be announced sufficiently in advance. The first five issues have been assigned to the following people: 1. Cor van der Klauw (Netherlands), 2. David Warren Piper (United Kingdom), 3. Lennart Levin (Scandinavia), 4. Ulrich Peter Ritter (Federal Republic of Germany), 5. Barbara Marentic-Pozarnik (Socialist Countries).

3.4. International Directory of Research and Development Workers in Higher Education

This will be published annually. It will include the names, addresses and institutions of EARDHE members as well as information on their interests, current work and recent publications. This information will be indexed, thus providing easy access to the information necessary for building a network of communication and collaboration in higher education.

4. Why and how to become an EARDHE member

The new catalogue of EARDHE activities and services will hopefully represent in itself a powerful stimulus to become a member. EARDHE members are entitled to reduced conference rates at all EARDHE activities and at all events co-sponsored by EARDHE. They receive free copies of the Report on European Research and Development in Higher Education and of the International Directory. Furthermore they will be added to the mailing list of CEPES. This invitation to join EARDHE at the annual membership rate of sfrs. 60.— is extended to all readers be they from Europe or abroad. Application forms should be sent to Horst Noack or myself (see page 6).

President of the EARDHE:

Ulrich Peter Ritter, Professor of Economics and Higher Education, Department of Economics, Johan Wolfgang Goethe-University, Senckenberganlage 31 D-6000 Frankfurt, FRG

The other members of the EARDHE executive committee are:

Lennart Levin, Ph.D., UHA - National Board of Universities Stockholm

Horst Noack, M.D. Ph.D., IAE - Institute for Research in Education and Evaluation, Faculty of Medicine, University of Bern

Cor F. van der Klauw, Prof.Drs. Institute of Educational Research and Development, Erasmus University Rotterdam

Barbara Marentic-Pozarnik, Prof.Dr., Center for Pedagogical Training, Faculty of Phylosophy, Ljubljana

David Warren Piper, Director, University of Teaching Methods Unit, Institute of Education, London.

EDUCATIONAL RESEARCH AND DEVELOPMENT AT THE UNIVERSITIES IN THE NETHERLANDS

by A.I. Vroeijenstijn

Introduction

The system of higher education in the Netherlands consists of two sectors: the university sector, which comprises 13 universities, and the higher vocational education sector. This sector contains numerous rather small institutions with little in common and is concerned with the education of social workers, schoolteachers, sub-professional engineers, musicians and other similar groups. Although at this time the higher vocational sector is not yet integrated into the universities, attempts at integration are being made. At the moment the vocational sector is minimally assisted by educational Research and Development, although some R.W.O.-centres from universities give incidental support.
The university sector comprises 13 institutions:
9 general universities: State Universities Leiden, Groningen, Utrecht and the recently set up University of Limburg, Catholic Universities of Nijmegen and Tilburg, University of Amsterdam, Free University Amsterdam and Erasmus University Rotterdam
4 specialized universities: Universities of Technology at Delft, Eindhoven and Twente
1 university of agriculture: Wageningen.

The universities are financed by the Netherlands Government. To a high degree they are allowed, however, to follow their own policy with regard to research and instruction. As in other countries financial restrictions have been imposed on the Netherlands universities in recent years.

The restructuring of University Education in the Netherlands is currently under discussion. The general facts about restructuring are:

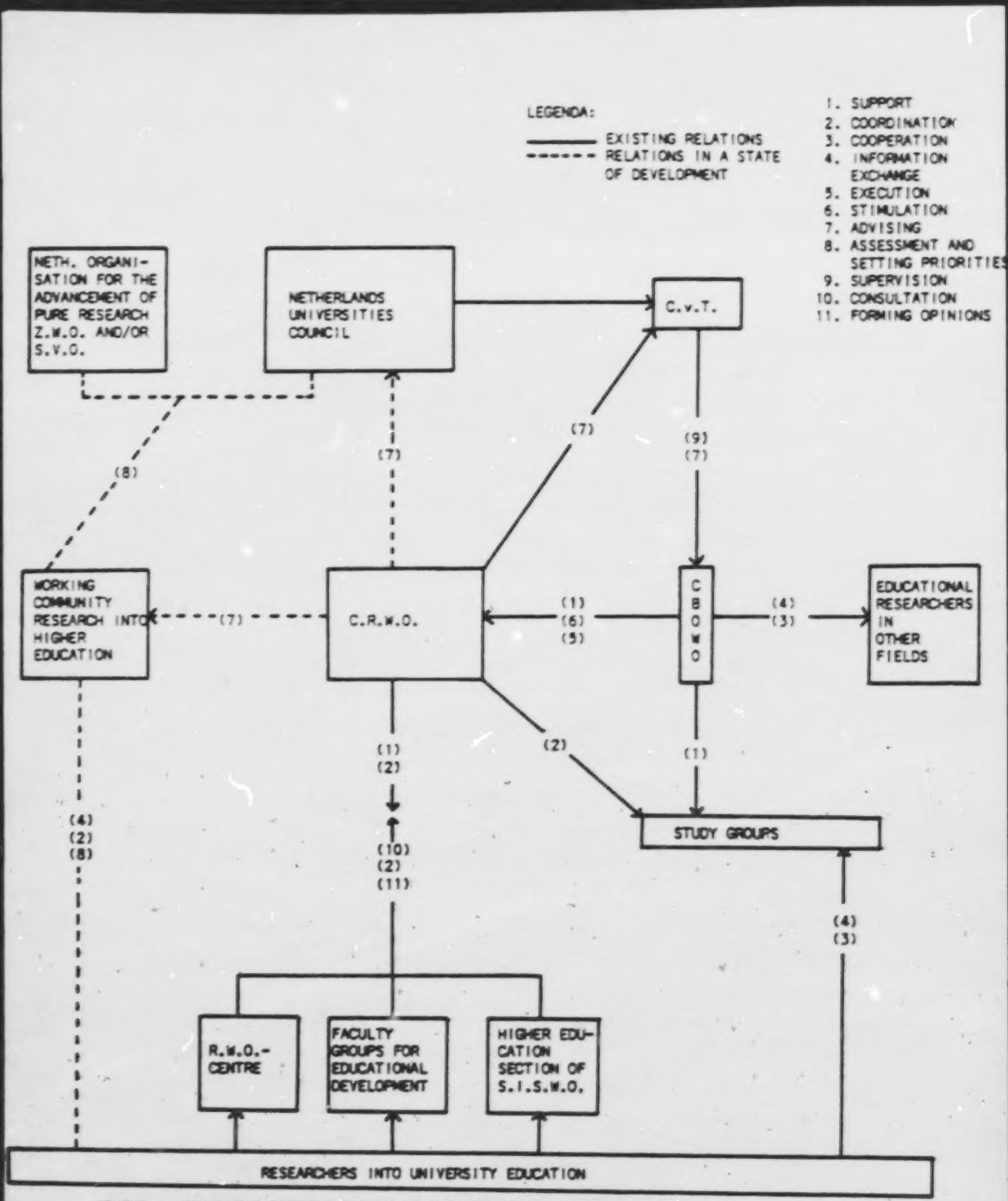
- the length of courses is to be reduced. The intention is to establish relatively short initial courses.
- the length of time for which students are permitted to be registered at a university is to be limited
- the courses and examination syllabi are to be phased, notably for the purpose of early selection and a larger measure of differentiation per discipline in university education
- to compensate for the shortened initial degree courses, post-doctoral courses and post-graduate refresher courses will be introduced.

The main reason for reconsidering the structure of university education is to be found in the increased demand for education during the last few decades. Influencing these considerations is a reduction in the funds available for university education and the emerging individual, social and academic needs, which makes changes in university education necessary. (Brenninkmeijer, 1975, NUFFIC, 1976a, 1976b, OECD 1976). University education is confronted by countless problems. To a certain extent these are problems of an educational nature. In their search for solutions to these problems, from 1963 onwards the universities have created centres to which the task of helping to solve these educational problems was assigned: the centres for Research into University Education (Research Wetenschappelijk Onderwijs, hence R.W.O.-centres). At the moment every university has such a centre.

The field of research into University Education has, in comparison to other branches of social sciences, a rather good organizational structure. The most important units are:

1) the university centres for research into and development of university education (R.W.O.-centres)
2) the Association for Research and Development in Higher Education in the Netherlands (Contactgroep Research Wetenschappelijk Onderwijs: C.R.W.O.)
3) the Central Bureau of Research into University Education (C.B.O.W.O.)
4) the working community "Research into Higher Education".

The different units also have relations with third parties, such as the Netherlands Universities Council and with the rest of the field of educational research.



SCHEME 1: SCHEMATIC REPRESENTATION OF THE STRUCTURE WITHIN WHICH THE R.W.O.-CENTRES AND THE C.R.W.O. OPERATE.

1. The centres for Research into and Development of University Education, the R.W.O.-centres

1.1. Task and function

The tasks and duties assigned to an R.W.O.-centre are the responsibility of the separate universities. Despite this it is possible (allowing for local variations and different emphases) to give a general survey of the tasks assigned to the R.W.O.-centres. The general function of an R.W.O.-centre may be defined as making a contribution to the improvement and innovation of university education on the basis of research carried out by the centre itself or elsewhere.

The R.W.O.-centre can realize this role by:

- carrying out development research and development work for the benefit of university education
- conducting fundamental research
- advising teaching staff and assisting them in the evaluation of their teaching duties
- increasing the competence and expertise of teaching staff with regard to their teaching duties
- making a contribution to solving educational problems with which the institutions are confronted on a central level
- making a contribution to the training of researchers as teachers
- making a contribution to the development of Education as a science by means of research
- with the aid of supplementary financing, making a contribution to the solution of educational problems with which the government is confronted.

The R.W.O.-centres' primary task is focussed on the teaching field. This means the centres' activities are aimed at the teaching in the faculties or departments, and for a large part are for the benefit of and in co-operation with those involved in the teaching. In addition to this "traditional client" of long standing, there are also many other groups who want to make use of the services of an R.W.O.-centre: the university as a whole and the Government (i.e. Ministry of Education and Science).

1.2. Fitting into the organization of the university

The R.W.O.-centres have been fitted into the organization of the university in rather different ways. In some universities they form together with other institutes (such as the audio-visual service, bureau for educational statistics, etc.) a central educational institute (Delft, Twente). In some other universities the centres are incorporated in the central-services organization of the universities (Utrecht, Leiden, Tilburg, Groningen) and in other universties again they have been placed as a department (vakgroep) within some faculty as separate study groups for educational research and development and work together in a university team (Eindhoven, Rotterdam, Maastricht). The organizational set-up is partly a result of the organization of the universities and partly reflects the manner in which the philosophy regarding the task and function of these institutes has progressed (Van der Klauw, e.a., 1975).

The position of an R.W.O.-centre can be important. The universities generally have deliberately and consciously decided to fit the R.W.O.-centres in a "neutral" way into the organizational structure of the universities. This is to prevent the R.W.O.- centres from occupying an advance "conflict-situation" position. The different ways of "fitting in" create some problems with R.W.O. co-operation on a national level and with keeping track of the developments in educational science and policy development at the different centres.

The staff of the educational research centres at the moment comprise about 110 researchers in all. The centres differ fairly in size: Utrecht for example has 13 researchers, Wageningen, the smallest, 3 researchers. The medium sized centre has 8 researchers. Originally the staff mainly consisted of psychologists. At present the staff of most centres is much more varied: psychologists, sociologists, educationalists, mathematicians, chemists, physicists, etc.

1.3. Activities

The activities of the first three years of the R.W.O. institutes' existence can be roughly split up into three groups:

- evaluation of certain parts of the educational system: evaluation of lectures, practical work, new student introduction activities, tutorship, etc.
- testing problems: introduction of multiple choice examinations for a variety of educational objectives, itemscoring and test indices, etc.
- statistical analyses of student data: flow analysis, "drop-out/ passing percentages" for examinations, etc.

At the end of the '60s, beginning '70s, a shift took place in the activities of the R.W.O. institutes. This shift has not been the same for all the centres but a general line can be discerned along which educational research has developed in the R.W.O.-centres.

First: a change from descriptive to prescriptive research.
The emphasis shifted from questions such as: "How does education function and what are the results of education?" to "How should education be constructed?" This shift in emphasis was accompanied by a development in the methodology of educational research. This has been developed according to the model of "systems construction" (see Meuwese 1970).

Second: a change in the nature of projects.
Short-term projects and "ad-hoc" research and development work have been replaced by more widely directed and long-term projects.

Third: the R.W.O.-centres direct much of their attention to influencing the educational climate itself.

In respect of the third group of activities mentioned above, it can be said that one of the greatest problems with educational innovation is that the climate is often unfavourable. Within the university, research carries more weight than teaching. Career development is, as a rule, exclusively based on research performance. The teaching staff

are not prepared for their educational tasks. The communication gap between the educational specialist and the university teacher is therefore, as a rule, very wide. This all accounts for R.W.O. attention for staff development, long-term co-operation with the teaching staff and popularisation of educational know-how (Van der Klauw, 1975).

2. The Association for Research and Development in Higher Education in the Netherlands (C.R.W.O.)

At a very early stage the R.W.O.-centres realized that mutual consultations were important. For this purpose the C.R.W.O. was set up in 1966. The exchange of information among the centres at first related to problems which arose in connection with establishing a centre, with fitting an R.W.O.-centre into the organizational structure of the university and with a discussion of the functions and tasks a centre could undertake. Soon, however, the nature of these consultations changed. Due to changes in views of educational policy, both of the central government and of the universities, the area of discussion was extended considerably.
The direction into which, the way in which educational research activities for university education should develop also became the subject of discussion and scrutiny.
The co-operation of the R.W.O.-centres in the C.R.W.O. has led to a number of concrete results:

* the organization of congresses and conferences:
  - 1st National Congress for Research into University Education, Eindhoven 1966
  - 2nd National Congress for Research into University Education, Utrecht 1968
  - 3rd National Congress for Research into University Education, Delft 1976
  - Conference at Oud-Poelgeest 1969
  - Conference at Helvoirt 1971
  - Conference at Driebergen 1972
  - Conference on methodology 1975

* Publications:

- National Congress for Research into University Education, Parts I and II, Eindhoven, Technological University, 1966
- R.R. Gras and R.A.P. Tielman (eds.), Research into University Education, Parts I and II, Utrecht 1968, Proceedings of the Second National Congress, 1968
- C.R.W.O., Research into University Education, Groningen, 1968
- C.R.W.O., Restructing without Re-programming, 1972
- M. Matthijssen, Research into University Education Under Way, SISWO, Amsterdam, 1973
- W.M. van Woerden, et. al., The Construction of Higher Education, Utrecht 1973
- C.F. van der Klauw and J.J.W.M. Wagemakers, Educational Research and Development in Dutch universities, C.B.O.W.O., 1976
- A.I. Vroeijenstijn and W.M. van Woerden (eds.), Educational Research and Practice I and II, Delft 1975-1976
- R.W.O. Project file 1973-1974 and 1975-1976, C.B.O.W.O., 1974 and 1976
- Educational Research (Onderzoek van Onderwijs) 1972 - (number of subscribers approximately 3,000)
- R.W.O.-Contact, inrernal newsleter, C.B.O.W.O, 1976- .

It should also be mentioned that the C.R.W.O. was involved in or contributed to the establishment of:

- The European Association for Research and Development in Higher Education, the E.A.R.D.H.E.
- the Society for Educational Research, the V.O.R.
- the Society for Education and Computer, the V.O.C.
- the Co-ordinating Committee for Education of the Netherlands Universities Council, the A.R.C.O.
- Educational Research study days
- the Committee for Preliminary Investigations into Policy Issues in Higher Education.

3. The Central Bureau for Research into University Education, C.B.O.W.O.

The importance of the increasing number of R.W.O.-centres and the significance of the C.R.W.O. were soon recognized by the Netherlands Universities Council. Consequently, the ad hoc Committee for the Promotion of Research into University Education was set up by the Netherlands Universities Council in 1967. On the basis of proposals submitted by this Committee the Central Bureau for Research into University Education (C.B.O.W.O.) was created. On the inception of the Bureau, 6th February 1969, the Netherlands Universities Council assigned the following tasks to it:

"a. to support the activities of the local university centres for research into university education;
b. to contribute to making the collective efforts of these centres as effective as possible and to adjust these efforts as closely as possible to the practical needs felt to exist in university education;
c. to give teaching staff access to information and advice based on research and leading to innovation in education;
d. to promote that young scholars acquire competence as researchers in this field."

The task of the C.B.O.W.O. can be described as: making a contribution to the improvement and innovation of higher education by:

- dealing with the matter of organizing and infrastructural provisions
- developing and maintaining a good communication system between researchers, between research and practice, between research and policy
- developing and maintaining instruments, necessary for realizing the goals of the different units in the field of educational research, I.e. edition of a quarterly, congresses, publication, etc.

From this description of role and tasks, it will be evident that the function of C.B.O.W.O. is very closely related to the work of the R.W.O.-centres. From the moment of its inception, the C.B.O.W.O. has indeed an important supporting role. Many activities of the C.R.W.O. have been realized at the suggestion of and/or with the co-operation of C.B.O.W.O.

4. The Working Community (Werkgemeenschap) "Research into Higher Education", the W.R.H.O.

A new phenomenon in the field of educational research is the Working Community (Werkgemeenschap).

Some researchers in other sciences are already united in so-called Working Communities. At the moment they are fitted in the organizational structure of the Netherlands Organisation for the Advancement of Pure Research (Z.W.O.).
In the development of policies in the Netherlands with regard to Sciences and Research, an effort to establish more Working Communities and with a wider scope is to be perceived.
A Working Community can be described as: a national collaborative body of researchers with common interest in special research. The goals are: to raise the quality, the relevance and effectiveness of research.
The tasks of a Working Community are:
- stock-taking of on-going research
- exchange of information
- stimulation and co-ordination of research
- evaluation of research and research proposals
- to put priorities on research proposals in respect to funding.

The field of educational research is thinking about adapting the idea of a "Working Community" for educational researchers (Vroeijenstijn 1978 b.). At the initiative of the C.R.W.O. a Working Community for Researchers into Higher Education is already established, the W.R.H.O.

5. The C.R.W.O. and its relationships with other organizations

The C.R.W.O. also maintains relations outside the field of research into university education, which is described above. The outside relations can be divided into:
- contacts with the Netherlands Universities Council
- contacts with the Ministry of Education and Science
- contacts with other educational researchers.

5.1. Contacts with the Netherlands Universities Council

The relation between the C.R.W.O. and the Netherlands Universities Council has changed during the last year. In 1976 it was impossible for the C.R.W.O. to be heard in the Council at the discussion of the report of the Exploratory Committee into Education Research for reason of its "informal status".

At the moment the Council has recognized the C.R.W.O. formally by giving the chairman of C.R.W.O. an observing membership in the Committee for Educational Questions in University Education (Commissie Onderwijsvraagstukken Wetenschappelijk Onderwijs), the C.O.V.W.O. This commission has been proposed within the framework of the proposals for restructuring the Netherlands Universities Council.

The intention is that the C.O.V.W.O. establishes a working group. This group shall direct its attention to educational problems and necessary educational research to solve these problems on a national level. The working group shall be composed partly of representatives, of policy makers, of the universities, partly of educational specialists, i.e, researchers into university education. In this manner a meeting point between policy makers and educational researchers can be formed.

5.2. Contacts with the Ministry of Education and Science

The C.R.W.O. also has contacts with the Ministry of Education and Science. The former Minister of Education and Science, dr. J. van Kemenade, has often appealed to the researchers into university education to give attention to research into more economic study systems, into technological aids, into selection, etc. Informal deliberation between ministry and C.R.W.O. and C.B.O.W.O. has led to the formation of the Committee for Perliminary Investigations into Policy-issues in Higher Education under chairmanship of the director-secretary of the C.B.O.W.O.

The Committee has worked out some research projects to which the R.W.O.-centres can subscribe.

5.3. Contacts with other educational researchers

Educational Research in the Netherlands is carried out in three more or less separate channels:

1. the departments (vakgroepen) of Educational Science, Educational Psychology, Educational Sociology in the universities
2. (semi-)university institutions, specialised in educational research and financed by special funds
3. the centres for Research into University Education, the R.W.O.-centres.

The departments and institutions are specialised in primary, secondary and adult education. In recent years more and more relationships, deliberations and co-operation are to be seen. The opportunities for formal and personal contacts are increasing: the Society for Educational Research (V.O.R.), Educational Research Study Days (O.R.D.) and in the future perhaps the Working Committees.

6. The policy-plan of the C.R.W.O.

In 1978 the C.R.W.O. has published a policy-paper*. All the activities -in progress, in preparation or planned- are set out in a coherent policy-statement. The purpose was threefold:

- internally as a means of making C.R.W.O. better (and wider) known and to give more adequate publicity to the activities, aims and function of the C.R.W.O.
- to gain formal recognition as the national body for collaboration and consultation.

The policy-plan has the following five components:

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* An integral translation of the policy-plan can be obtained with the Central Bureau for Research into University Education (C.B.O.W.O.).

- a policy of support of the R.W.O.-centres
- a policy of dissemination
- the policy to be followed with regard to assisting in the process of forming opinions and common standpoints
- a policy with regard to quality and relevance of research
- a research policy.

While avoiding going any further into the details of the policy-plan, it may be said that

- the policy of the C.R.W.O. is a direct result of the policies of the local R.W.O.-centres. The policy has its origin in the centres.
- the policy of the C.R.W.O. aims at making a contribution to the realization of the tasks and duties of the local R.W.O.-centres
- its policy aims in particular at those problems which go beyond the abilities of the local centres or which require a common, joint approach.

The policy of the C.R.W.O. aims at five goals, viz.:

1. Support of the activities of the R.W.O.-centres by:
   1.1. increasing the competence and expertise of researchers into university education in their own subject or field
   1.2. promoting and stimulating the exchange of information between the staff of the R.W.O.-centres
   1.3. ensuring that those active in the field of university education are involved more in educational research
   1.4. stimulating and promoting that universities formulate an educational policy from which also activities for research into education may be derived
   1.5. making a contribution to the development of such a career development and staff management as to retain experienced researchers for the R.W.O.-centres
   1.6. ensuring that the image (within and outside the university) of the contributions to the improvement of education made by the centres for research into and development of university education.

2. To promote the distribution and dissemination of the results of educational research in general and in particular of the activities of the R.W.O.-centres, by:
   2.1. stimulating the philosophy that the competence and professional skills of university teaching staff (as far as their teaching is concerned), should be raised and extended
   2.2. drawing the attention of all interested parties to the results of educational research activities conducted by R.W.O.-centres and other institutes, and this in appropriate form
   2.3. systematically collecting and integrating the results and findings of educational research and development.

3. To make a contribution to the process of forming opinions and common standpoints about:
   3.1. educational policy both of the central government and the joint institutions (i.e. universities) as far as the educational aspects and implications are concerned
   3.2. the development of research into education in the Netherlands.

4. To raise the quality of educational research aimed at an improvement of education and to assess and appraise the relevance of such research.

5. To promote and stimulate an "educational policy" via better co-ordination and structuring of research which has been financed out of various flows of funds, in close co-operation with the Working Community Research into Higher Education.

In certain areas of these policies, certain activities have already been undertaken. Others are in the process of being undertaken while yet others will have to be elaborated and thought out further.

Necessary conditions for the implementations of these policies are the formal recognition of the C.R.W.O. and support for it by C.B.O.W.O.

7. Dissemination of the results of Educational Research activities

One important goal of the C.R.W.O. policy-plan refers to taking care of the dissemination of the results of Educational Research activities. At the moment the C.R.W.O. has, in close co-operation with the C.B.O.W.O., two projects in progress:

- the 4th National Congress for Research into University Education
- the series "Onderwijskundige Informatie voor het Hoger Onderwijs" ("Educational Information for Higher Education").

The 4th National Congress for Reseach into University Education

On 17th and 18th December the 4th National Congress for Research into University Education was held at the Eindhoven University of Technology.

Whereas the 3rd National Congress aimed especially at increasing the competence of university teaching staff, this time the 4th National Congress focused attention on policy-making in the institutions for Higher Education. With the motto "Improvement of Quality of Education" the C.R.W.O., in co-operation with the Netherlands University Council, aimed at accentuating the necessity for a "policy for higher education" within the universities themselves; the C.R.W.O. presented the implications of the results of research activities in policy-making and the consequencies of the policy for the further activities of the R.W.O.-centres.

The series: "Onderwijskundige Informatie voor het Hoger Onderwijs"

One success of the dissemination-policy is the publishing of the first book in the series "Educational Information for Higher Education". In collaboration with the publisher Het Spectrum, the C.R.W.O. has obtained the possibility for a subseries in the Spectrum - Aulareeks (i.e. the Netherlands counterpart of the English Penquin or Pelican books). This series aims at teachers and students in higher education. Autumn 1980 and spring 1981 six books will be published. Some of the subjects: group teaching, lecturing, testing and course constructing.

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UNIVERSITY OF AMSTERDAM

CENTRE FOR RESEARCH INTO HIGHER EDUCATION

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Managing Director: co-ordinating team.

The C.O.W.O. is a research centre as well as a central service unit to the University. It consists of approximately 14 educational researchers and one full-time and one part-time secretarial assistants. The C.O.W.O.'s director is currently serving in a temporary appointment on the Board of Directors of the University and is presently replaced by a co-ordinating "triad", consisting of Tim A.M. van Dijk, Bert Camstra and Henk J.M. van Berkel.

Objectives of the C.O.W.O. are:

1. both fundamental and applied research and development into problems of higher education, and application of the results thereof within the departments of the university
2. instruction and advice to teachers, students, departments and the central university administration, on educational and instructional matters
3. assistance in (re-)structuring courses and curricula
4. teacher development, by means of the C.O.W.O. University Teachers' courses.

The activities are as much as possible organized in the form of projects. In these projects the C.O.W.O. works together with one or more departments in order to achieve a well-specified research and/or development goal. These projects generally last a couple of years, and should yield generalizable results, i.e. results that can be applied in other departments or at other universities as well. To this end the results are translated into publications which are generally available (although most of them are in Dutch). Roughly 50 reports, papers, articles and conference contributions are published each year.

An important aspect of the C.O.W.O. activities is the C.O.W.O. teachers course ("Docentencursus"). This is a series of some ten units, organized with the help of a basic text and a number of meetings, in which a variety of topics of relevance for university teachers is covered. These topics include topics such as 'constructing a course', 'subject-matter representation for teaching', 'discussion groups', 'lecture presentation' and so on. Some of the texts developed at the C.O.W.O. will be published in the C.R.W.O. series Educational Information for Higher Education ("Onderwijskundige informatie voor het hoger onderwijs"), with Het Spectrum, Utrecht.

One of the more important projects during the past few years has been the PLATO Pilot Project Amsterdam. This embodied the first European try-out in a university environment of the sophisticated PLATO system for computer-assisted instruction. By means of this project, which ran from October 1977 until December 1979, the applicability of CAI-systems -such as PLATO- within the framework of the curricula of the University of Amsterdam has been assessed. To this end, five PLATO terminals were connected to the CDC PLATO-system in Brussels. Two different approaches were taken, the 'in-depth' approach and the 'breadth' approach. The first consisted of a couple of experiments of teaching with PLATO in five departments, viz. French, Physics, Pedagogics, Italian and Musicology. The second consisted of an overall evaluation of the potential applicability of existing lessons on PLATO, in the curricula of the university. Some of the conclusions are that PLATO is an excellent system for CAI, that the usefulness of existing lessons is very limited, that the instructional effectiveness for certain learning tasks is fairly high as is also its efficiency (in two experiments PLATO reduced learning time with approx. 50%), and that the students like it. It was also concluded, however, that PLATO in itself was too expensive. At present attempts are being made to select or to develop systems that are equal to PLATO in educational quality, but less expensive.

A completely different example of a 'typical' C.O.W.O. project has been 'The students with part-time jobs' ("Werkstudentenproject"). For many years already the opinion existed that the combination of work and study caused many problems. However, only little information about the size and nature of the problems was available. During 1978-1979 information was collected

by extensive surveys with students in the Social Sciences at the University of Amsterdam. It appeared that approx. 40% of the students have a job of at least 10 hours a week next to their study. It also became clear which kind of problems they experience and in which way they try to solve them. At present some small-scale attempts are made to help the student.

At the moment C.O.W.O. is occupied with 15 to 25 projects of this kind.

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The Educational Research Group of Eindhoven University of Technology has been (and is still in the process of) making a gradual shift away from their main concern for the "efficiency of educational systems" to questions about the quality of learning and learning experiences. To illustrate the point, let us give you a very rough sketch of this development, starting some six years after the foundation of the group.

Already in 1969 the group started research on individualized instruction for university students. This was done in close co-operation with the department of Mechanical Engineering. At the same time the development of a software system for computer management of such an instructional system was initiated. Positive outcomes of the research on individualized instruction and experience with the computer management aspect of this resulted in further development of the software system itself and also of the know-how of implementing individualized instructional systems. Eventually a refined and user-oriented version of the software system was implemented on the large central computer of Eindhoven University of Technology. This system is now in use for the management of several university courses throughout the country and its maintenance has been transferred to a users association.

One of the latest courses to be implemented and set up in close collaboration with our group, is an integrated course for introducing students in the technology departments into the different disciplines of philosophy and social sciences.

The close interaction between research and development, illustrated above, reflects our group's choice for a systems approach (after a period of

more traditional educational research) to educational problems. It also marks the deliberate choice to contribute to the "development of educational technology" as a separate discipline.

The gradual shift mentioned earlier (from a concern for efficiency in education to the question of improving the quality of education) focussed on an interest in the training of student's problem solving skills in te area of technology. Again research and development of courses paralleled the consolidation of the "educational technology" approach. This line of interest still continues, but gradually generalizes to questions about learning and learning experiences from the perspective of educational technology, rather than from the perspective of experimental psychology. In this context learning comprises the gaining of knowledge, understanding and insight into subject-matter as well as the gaining of social skills, problem-solving skills, and designing skills. More specifically, among the questions of interest are such as: what do students do with the subject-matter? What do teachers do with the subject-matter? How can subject-matter be handled more creatively? How can students achieve a better understanding of and insight into subject-matter? Can learning experiences be improved? Parallel to these questions are questions about appropiate arrangements of instruction in a wide range of aspects: didactical aspects as well as aspects of problem-oriented instruction in small groups, developing test instruments and situations as well as teacher training, designing more appropriate feedback facilities in computer managed instruction as well as effective use of audio-visual aids and materials.

Several subjects of the indicated field of interest have been, or are in the process of being translated into research projects.

The impression may arise that our group is purely a research group. This, however, is not so. Services that satisfy the needs of the departments of technology of the university more directly, have to be provided too. For several years now, members of our staff have invested much energy in the evaluation of courses and programs of various departments. Involvement in these activities is, however, reducing. As a result there are better opportunities for tackling the more fundamental problems that have been mentiond above and which are more relevant to the improvement of higher education in the near future.

Presently the group consists of a permanent staff of four researchers, three computer programmers and two half-time secretaries. Two staff members are with the group on a temporary basis in connection with projects on: (1) the evaluation and improvement of the integrated introductory course in philosophy and social sciences mentioned before; (2) the development and try-out of courses and course materials for teacher training.

Projects

1. Learning to solve problems in scientific and technical domains
2. Evaluation of the quality of instruction in the department of architecture
3. Characteristics assigned to a "good" teacher by students and teachers of Eindhoven University of Technology
4. The measurement of insight and understanding of subject matter and the subsequent supply of feedback to enhance insight and understanding
5. Expectations about sudden changes in supply and demand for post-secondary education in the next decades.
   This is a joint project of the centres for educational research of the universities of Eindhoven, Nijmegen and Limburg.

Publications

DE VREZ, J.H.P.: Projekt Technische Wetenschappen Eindhoven: Onderwijs in technisch probleemoplossen, ondewijsconstructie en onderzoek naar condities die het leerresultaat beInvloeden. Eindhoven: rapport van de vakgroep Technische Mechanika en de Groep Onderwijsresearch van de Technische Hogeschool, augustus 1978.

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The main goal of the centre is: improving higher education in general and at the University of Groningen in particular. Means to this objective are: conducting educational research, participation in course and curriculum construction and training of university teachers. The position of the centre in the organization of the University is rather autonomous, i.e. the centre is free to carry out its research and to give advice independably.

The activities of the centre will be exemplified by the presentation of:
- a project in the subfaculty of Pharmacy, concerning an investigation into the curricular objectives and an attempt to reconstruct the subfaculty's curriculum.
- a recently constructed Instrument for Systematic Evaluation of Courses (ISEC).

The Pharmacy Project

A broad discussion about the restructuring of the Netherlands system of higher education has been going on in this country since 1968. As a consequence of this discussion the subfaculty of Pharmacy at the University of Groningen installed a committee (the K.V.H.) in 1975 to co-ordinate the activities concerning the restructuring of the Pharmacy curriculum.

In January 1976 this committee initiated a project which aimed at getting a better insight into the relevance of cognitive and non-cognitive objectives of the existing curriculum for a specialisation in research and a for vocational specialisation. Questionnaire outcomes proved that not all objectives should be the same for both specialisations. A multivariate analysis of the objectives yielded three broad categories, representing the whole domain of pharmacy: quality control, drug action and pharmaceutics.

The next stage in the project was the translation of the objectives under consideration into a new curriculum. To this aim the departments were requested to relate the objectives to the principal pharmaceutic subject-matters of the old curriculum and to divide the subject-matter into small units (subject-matter units). The information thus gathered served as a starting point for a discussion, between the departments of the subfaculty, on the design of the first two years of the new curriculum. Main topics of the discussion appeared to be the extent and content of the diverse subjects and the interrelationships of the subjects. The results of the discussion were translated into a proposal with regard to the first two years of the curriculum. A basic suggestion was that these first two years should be organized into blocks. In consultation with their teachers, a group of students worked out the didactical design of the first year of the curriculum. This new first year started in September 1979.

In 1978 the K.V.H. formed groups of teachers and students who were requested to construct three different parts of the remaining curriculum aimed at the integration of the subject-matters. Each part was required to cover one of the three main domains of pharmacy, identified in the analysis of the objectives: quality control, drug action and pharmaceutics. This strategy resulted in a minor "failure": "ideal parts" were designed for each domain separately. What was needed was an integrated curriculum of manageable parts.

The K.V.H. reacted to this failure in making a new proposal. The main components of this newly proposed curriculum are:

- a core curriculum mainly consisting of 'non-pharmaceutic' subjects from supporting disciplines like physics, chemistry, biology and mathematics
- a core curriculum of the principal (pharmaceutic) subjects, structured around drugs presented in groups according to their pharmacological effect
- a third part consisting of the principal subjects structured around the three domains mentioned before with vocational or research specialisation.

At the moment of writing the departments were discussing this proposal. The final decisions should be made in September 1980.

Some evaluation activities of the centre

A main topic of research pursued by our centre is the evaluation of courses (course: a unit of curriculum, e.g. a second year course in genetica in a biology department). A thorough examination of existing course-evaluation instruments showed, that they usually lacked systematization, sophistication and a well-considered evaluation strategy. As a result, the staff of our centre decided to construct its own evaluation instrument. By now a second version of this instrument (ISEC: Instrument for Systematic Evaluation of Courses) is in operation. Up till now the ISEC has been applied in some fifteen evaluation research-projects. On the base of the experiences in these projects the ISEC was revised. A third version now exists. This consists of a kit for teachers and a kit for professional evaluators.

The main features of the instrument are:
- it is not a ready-made course-evaluation instrument, but rather a "master instrument" consisting of a set of auxilliaries and an elaborated strategy; by means of this master instrument "course specific" evaluation instruments can be constructed.
- the "master instrument" has been systematically derived from a conceptual framework embedded in Van Gelder's/Glaser's basic teaching model and from notions about effective collaboration of university teachers and students in evaluation research.
- teachers, students and evaluators are co-operating as full partners in constructing the "course specific" instruments, in the interpretation of

evaluation outcomes and in the formulation of recommendations for the revision of the course which is being evaluated.

- ISEC is a reaction against standard instruments which -by their nature- usually lack content validity.
- moreover, it is a reaction against that kind of evaluation in which the evaluators are the experts and in which teachers and students are the non-experts, consequently playing a passive role.

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Purpose

Briefly, the general aims of the Educational Centre are: to contribute to the improvement and innovation of curricula and to assist in the development of effective educational and teaching practices within the Twente University of Technology. The centre consists of two units: the Centre for Educational Research and Development (in Dutch C.D.O.) and the Audio Visual Centre (A.V.C.). Both units are operating independently, though in close co-operation. The operating policy is drawn up by the boards of both units; the E.C. is managed by a managing director. If appropriate, the service of C.D.O. and A.V.C. is managed through project management.

Staff

Excluding administrative members, the C.D.O. consists of 12 academics (educationalists, psychologists, technical scientists, etc.), 5 of which are working partly in the C.D.O. and partly in one of the departments of the T.U.T.; the A.V.C. includes 2 producers, 3 technicians and 2 designers.

Service

The way in which the E.C. is working can be described as follows: giving of direct service and practical advice (e.g. test processing, construction of questionnaires, the use of a.v. media, searching existing a.v. material etc.), development of courses (or adapting existing courses and with or without application of a.v. media), development of media productions and support of the teaching task (by giving information, implementing training

courses, etc.). In most of the cases this work is done in the form of projects, where, besides the development activities, the necessary research is performed.

Survey of the activities of the E.C.

To give an idea of the field covered bij the E.C. the following research projects are mentioned:

- evaluation of existing courses, especially of socalled "bottle-neck" courses, investigation of the time spending of students, of the opinion of students about courses, teacher behaviour, etc.
- researches into the connections between student population and study results, study motivation, etc.
- research about the selection problems
- educational design criteria for printed materials.

A few examples of research and development projects are:

- evaluation and development of audio-visual materials
- application of mastery learning principles in the development of Individualized Study Systems (courses in Mathematics, Chemistry, Structural Engineering, etc.)
- study skills, resulting in a course for students
- teacher training and information: general educational orientation, improving lecturing, media information, etc.
- development of an introductionary course into the methods of scientific research (for freshmen)
- course development (e.g. Technical Design, Biomedical Technology, etc.)
- integration of the first and second year practica in the chemical curriculum
- development and production of informative or lecture supporting audio-visual materials.

In addition to advice given in the above mentioned areas, advice is also given on:

- methods of study support, tutoring, communicative techniques
- formulating educational goals
- construction of tests, etc.

Current projects include:

- teaching and learning "problem solving" in higher education
- research on the use of the computer within higher education
- different possibilities in educational feedback and testing procedures
- development of a "model" for course reconstructions
- development of interdisciplinary courses in "Public Administration"
- integration of the socalled "tertiary education".

Teaching and learning problem solving

Since 1975 the C.D.O. is involved in projects concerning the teaching and learning of "systematic problem solving" in higher education. It all started with the reconstruction of the existing course in freshmen Thermodynamics at the department of Chemical Technology (C.T.) From the beginning a second project goal next to the course reconstruction was to find principles for this kind of reconstructions of courses in higher education, particularly in science and technology, where problem solving is involved.

An explicit "programme of actions and methods" (PAM) to solve problems in Thermodynamcis was formulated. This PAM has been transformed into a system of heuristics that can be used by students in their learning process. Thereafter the teaching procedures and materials to "optimalize the students learning of systematic problem solving" were selected and constructed. Following introduction in an experimental course, these were evaluated. On the basis of these activities general construction rules for the design of this kind of courses have been generated. With their help other courses in the C.T. department were also reconstructed. A similar model of the process of problem solving has been developed in the course "Electromagnetism" (department of Technical Physics) and the course "Mechanics" (department of Mechanical Engineering) and a PAM has been derived from the model. As it was the case in the C.T. department examination scores indicate improved results with the reconstructed courses.

In the department of Public Administration a project has been started to develop some units for practice in "interdisciplinary problem solving in public administration". To this end simulation games have been set up, e.g. "Urban Renewal", "Changing the policy of the European Common Market". The

thinking processes are thus practised individually and in small groups. Here too, general rules for the construction of such courses have been formulated.

For further information address to: Kees Mettes, Albert Pilot, Henk Roossink (C.T.), Jaap van Weeren (T.P.), Gerrit Jan de Jong (M.E.) resp. Cees Terlouw (P.A.).

Dyadic training on lecturing

This training has been developed to help T.U.T. teachers in improving their lecturing. The training goals cover a number of different lecturing skills. The training procedure is based upon the analysis of video recordings of the lecture, instruction on the necessary skills, practice in one's own regular lecture and feedback. The participating teachers work together in pairs forming a "dyad". The training has been designed on the basis of literature study and has been developed further in a number of test versions. Through systematic evaluation data have been gathered for improving the training design. The course material consists of: the training procedure, which is elaborated in a "scenario" and a handbook on lecturing skills.

Further information is available from: Erik Smuling.

Individual multimedial learning package

The Audio Visual Centre designs and produces all kinds of instructional and informational materials. The used media are: video, film, tape-slide, transparancies, photographs and printed materials. The materials are developed and evaluated in close co-operation with the responsible teacher and the students concerned.

As an example we would mention here a multimedia, self-study package for the third year course "Constitutional Law" (department of Public Administration). It covers two video programmes, viz. "Separation of Power" (an introducton to the learning package, in colour) and "Freedom of Speech" (a registration of a work group session, in black/white). In addition there are four recorded lectures, a syllabus (with directions for the use of

the package, abstracts of the programmes), exercises, literature references and evaluation formulars.

Further information is available on request from: Jan Kobus, Dolf Heiligers, Frans Arnold (A.V.C.) or Cees Terlouw (C.D.O.).

English Language Publications of the E.C.

KLAUW, C.F. van der and PLOMP, Tj.: Individualized Study Systems; Basic Scheme and Example. (C.D.O., 1973).

HOUT, J.F.M.J. van and METTES, C.T.C.W.: The Course Development Project "Engineering Design" at the T.U.T.; Some Aspects of Planned Change in Higher Education. In: W.A. Verreck, ed., Methodological Problems in Research and Development in Higher Education (proceedings First EARDHE Congress, Amsterdam, 1974).

SMULING, E.B.: Development and Evaluation of the "Dyadic Training on Lecturing" (EARDHE paper, January 1979, CDO doc 78-1).

TERLOUW, C. The Development and Evaluation of an Inter-disciplinary Curriculum Unit within the Public Administration Dept. (EARDHE paper, January 1979; CDO doc 78-2).

KRAMERS-PALS, H. and RUIJTER, C.T.A.: Evaluation of a University Chemistry Programme (Paper Third Intern. Conf. on Chem. Educ., Dublin 1979; CDO doc 79-8).

METTES, C.T.C.W. e.a.: On Teaching and Learning Problem Solving in Science; a Method for Instructional Development and Evaluation Applied to a Course in Thermodynamics (CDO doc 80-3).

METTES, C.T.C.W., PILOT, A. e.a.: Teaching and Learning Problem Solving in Science; (I) General Strategy, (II) Learning Problem Solving in a Thermodynamic Course (Journal of Chem. Educ., early 1981).

WEEREN, J.H.P. van, e.a.:Teaching Problem Solving in Physics; a Course in Electromagnetism (Am. J. of Physics, 1980 or 1981).

A complete list of Dutch written publications is also available.

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The Department for Research and Development in Higher Education (O & O) consists of 12 academics, 6 administrative members and 9 staff members on temporary basis.

The department offers professional assistance to all those concerned with education within the University of Utrecht - teachers and students alike - in those situations where teaching and learning actually take place, within course teams or project groups, in seminars and short courses, in university departments, institutes and laboratories.

The department's activities can be considered under the following headings:

A. Advice and Consultancy

O & O staff members take part in a number of projects in different areas which have as their primary goal the development of new courses, the establishment of new study programmes to meet revised, up-dated objectives, the testing and development of alternative teaching methods and the improvement of testing and examination techniques.
They maintain close contact with education specialists, education committees and steering committees within the subject departments.

B. Research Projects

Included under this collective title are those projects directed towards the furthering of knowledge of the teaching/learning process, of the relationship between different educational factors, and the development of measuring intruments and procedures.

C. O & O Seminars for University Teachers

The department organizes a series of seminars for all those concerned with education within the university. By means of this programme, O & O contributes substantially to the knowledge university teachers command of the educational process, and their skills within it, and hence to the efficiency of education in the university. The seminars are centred round the following topics:

- arranging for teaching and learning.
  An introductionary course for new university teaching staff
- course development
- the structure of the first year of the academic study
- evaluation, measurement and decision making
- test construction
- practicals and tutorials
- teaching students in large numbers
- motivation
- objectives
- working in groups
- lecturing.

D. Dissemination, Documentation and Information Services

Appropriate support of the activities listed above necessitates a home-based documentation and information service for educational subject matter. Further, the wide circulation of educational information contributes importantly to the professionalisation of those responsible for giving and renewing instruction.

The most important channels through which O & O disseminates information are:

- O & O Memo series. A periodical directed to university teachers and other interested parties.
- The Mededelingen (Report Series) in which research results, developed instruments, projects reports, manuals and so forth are published.
- Bibliographies (including online retrieval) on education topics.
- A house library, as freely accessible as possible.

- Articles in national and international professional journals.
- Editorship (in co-operation with Van Loghum Slaterus) of the Handbook (Instructional practice).
- Member of the editorial board of the magazine "Registration".

List of Projects

1. Curriculum projects
   e.g. - Chemistry
   - Pedagogics
   - Environmental Science

2. Advice and Consultancy
   e.g. - Student Counseling Office
   - University management
   - Teacher education
   - Staff development
   - Social policy for students
   - Social and legal position of students
   - Participation of university employees in policy decision
   - Practical work in anatomic laboratory
   - Organisational development in social-medical prevention
   - etc.

3. Professional training/staff development projects
   e.g. - General seminars for those concerned with education within the university

4. Course development projects
   e.g. - Medical sexuology
   - X-ray anatomy
   - Faculty of law
   - Emancipation for female staff members
   - Administrative law
   - Faculty of Biology
   - Faculty of Chemistry
   - etc.

5. Evaluation projects

e.g. - Faculty of Sociology
- Faculty of History
- Faculty of Dentistry
- Faculty of Psychology
- Faculty of Philosophy

6. Post-academic projects

e.g. - Faculty of Law
- Refresher course General Practitioners

7. General development/innovation projects

e.g. - Andragology

8. Educational technology for doctoral students

e.g. - Fysiology
- Physics
- German nation and culture
- Zoological Oecology and Taxonomy
- Chemistry
- Endocrinology

9. Research projects

e.g. - Decision ratio's for faculty members
- Factors determing succes of course development project
- The hidden curriculum in law
- The Carroll model of teaching and learning and its use for study planning.

The project "Dentistry" of the Department of Research and Development in Higher Education

At the start of 1978 the department of Dental Conservation requested our co-operation in designing a staff development programme within their faculty group. The basic wish was to begin with a programme over didactical methods.

Up to this point in time the contact between Dentistry and our department (O & O) were in principal incidental. There had been some short co-projects and one department in the faculty had on one occasion followed a teacher training course, offered by O & O. At this period the introductory course for new university teaching staff was beyond the experimental stage and a number of staff members from Dental Conservation had followed the course on their own initiative. Their experience with this seminar was successful enough for the department of Dental Conservation to make the formal request for staff development assistance mentioned above.
The department of Dentistry has two major disciplines (Conservation and Prosthetic) and several minor ones. The two major disciplines are divided into sub-disciplines. There is also an education development section within the faculty itself.
It was agreed that all "Conservation" staff members should follow the Introductionary Course for teachers. It was also agreed that thereafter a plan would be drawn up for an additional course, tailormade for the specific needs of the curriculum in Conservation Dentistry. Between 1978/79 six seminars were given for this group of teachers. This led to a number of small projects concerning the establishment of criteria and procedures for student evaluation.

The increasing frequency and intensity of the contacts between the subfaculty and our department has resulted in a more "institutionalized" form of co-operation. This co-operation has been formalised in a contract. The essence of this contract is that there would be periodic reviews and discussions between the two parties and that all education projects in the faculty would be realized on a co-operative basis. (Intentions were also expressed concerning the mutual development and presentation of further seminars, training units, publications and so on). It was in principal agreed that the discipline Dental Conservation should have access, as and when needed, to the education and staff development know-how within O & O.

Currently the Department of Dentistry is involved in the reconstruction of the faculty curriculum. This is in connection with a national requirement to shorten the study time. Under the combined guidance of O & O and the education section of the subfaculty, the education committee within the subfaculty has created a curriculum profile indicating the content and

strategies for the new curriculum. The target date for the implementation of the new curriculum for the first study year, is September 1981. The curriculums for the succeeding study years are to be implemented in 1982. Our department is involved in this under a commitment to provide a number of "study days" for the staff members of committees who are involved in and responsible for curriculum renewal. During these study days the educational implication of curriculum reconstruction is handled.

The Department of Prosthetics was, at first, not formerly involved in the activities and co-operation described above. However, an interest does now exist. A first group of staff members from this discipline has followed the O & O Introductary Course. Their reaction was highly positive and a second group will now follow the same seminar.

This new contact leaves us with the impression that the time for staff development in this second discipline has begun to ripen. As a result the staff development of the whole faculty, with our help, now presents itself as a real possibility.

To conclude: there is evidence that staff development on the co-operation basis described above has gained acceptance and impetus within the Department of Dentistry. Furthermore the instructional technology component in this development is acknowledged as something essential.

AGRICULTURAL UNIVERSITY WAGENINGEN
CENTRE FOR EDUCATIONAL RESEARCH AND DEVELOPMENT
(Bureau Onderzoek van Onderwijs)
Address: Stadsbrink 389III
6707 AC Wageningen
Telephone: 03870 - 84486
Managing Director: Ir. G. Muggen

Staff: 3 full-time, 2 half-time professional workers, a secretary and a half-time research assistent.

Objective: to contribute to reform and improvement of the curriculum of the Agricultural University.

Organization: priorities are made on behalf of the faculty by an advisory committee. The centre has an experimental democratic organization; one of the full-time workers is chosen and appointed as co-ordinator for a period of one year.

Main activities:

1. advising educational committees and teachers in:
   - a new organization of the curriculum
   - a new regulation of the exams
2. research and development projects
   The centre is actively involved in the design of an individual study system for the course "social economics" for the first year students at the Agricultural University. A first try-out in 1979/1980 showed a substantial difference in the results on the examinations in favour of the new method.
   Another project deals with development and evaluation of a study-tutoring system.
3. training of teachers and members of educational committees
   We organize twice a year an introductory training for newly appointed teachers. Also twice a year a training in examination techniques is available. We have an experimental training for tutors of project-based education.

The centre tries to achieve its aims by a client-centered strategy.

LIMBURG STATE UNIVERSITY

CAPACITY-GROUP FOR EDUCATIONAL DEVELOPMENT AND RESEARCH

(Capaciteitsgroep voor Onderwijsontwikkeling & Onderwijsresearch)

Address: P.O. Box 616
6200 MD Maastricht

Telephone: 043 - 888888

Managing Director: Prof.Dr. W. Wijnen

The Capacity-group consists of 20 full-time and 2 part-time academics and 2 full-time and 3 part-time administrative members.

Up to early 1979 the group, consisting of psychologists, educationalists and M.D.'s dealt mainly with the implementation and improvement of the problem-oriented educational system applied in this very young university (1974), especially so in the medical faculty. This included active participation in the medical programme in the various teacher-roles (tutor, content-expert, (co-)author of learning and evaluation material) as well as training and guidance of staff and students.
This same range of activities remains a very important part of the daily workload, but is now extended to the second faculty: that of Social Health Science.
From 1979 on a number of development and research programmes, which had been conceived earlier, have been started:

- problem-solving in the medical field
- assessment of problem-solving skills
- development of a (medical) test-itembank for overall summative evaluation purposes
- the functioning of the problem-oriented educational system
- training and education of staff.

Due to the new, unorthodox approach a fair amount of time is spent on introducing people to the principles and shape of problem-guided learning: articles, workshops, etc. A number of educational experiments, based on the problem-oriented approach, especially in neighbouring intitutes for higher vocational education, are supervised by this capacity-group for Educational Development and Research.

DELFT UNIVERSITY OF TECHNOLOGY
THE EDUCATIONAL RESEARCH AND DEVELOPMENT CENTRE (ERDC)
(Sektie Onderzoek en Ontwikkeling, Onderwijskundige Dienst)
Address: Mijnbouwplein 11
2628 RT Delft
Telephone: 015 - 785557
Managing Director: W.M. van Woerden

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a. The ERDC has a staff of six, including the head of the group. The Centre is part of a larger organization, the Educational Service Centre, other parts being the Statistical Service Group and the Audiovisual Centre.

b. Within the general task of the Educational Service Centre, improving the efficiency of the university curriculum, the ERDC has five specific tasks: evaluation of courses, development and innovation of new methods of instruction and testing, teacher training, applied educational research and general advice on educational matters.
The ERDC does its work in close co-operation with the other groups within the Educational Service Centre as well as with educational advisers, working in the Departments of the University.

c. The work of the ERDC is organized in projects. Within one project several of the tasks mentioned are fullfilled. At the moment there are five research and development projects going on:
   1. The introduction of the project method of instruction: In a Department a new instructional method is introduced, having students work in groups on real life problems. The purpose is to have students integrate the knowledge and skills learned in several courses and laboratory work. Evaluating the relevance of the work in a social context is part of the group work.
   2. Individualization of instruction: Variations of the Personalized System of Instruction and the Keller Plan adapted to the particular needs of the University are introduced in the curriculum.
   3. Teacher training: In an introductory course newly appointed teachers are familarized with practical concepts from the field of educational

psychology and technology. Teacher skills are trained. On demand, courses are organized on different topics, as educational testing, lecturing and project work.

4. Allocation of students: In most academic fields courses are offered by different institutions on different levels. The allocation of students to these levels is subject of a research project.
5. Educational testing: Experiments are done with different forms of educational tests that are mostly teacher-made. Establishing standards is part of the project. The use of "compromise models" for setting standards is a special subject of research.

d. Individualization of instruction

The lecture method is the most widely used instructional method at our university. The research literature has shown the superiority of the personalized system of instruction (PSI) over the lecture method. Several experiments at our university confirm these findings. PSI and the lecture method differ widely. In PSI the task of the teacher consists mostly of the preparation of materials (educational text) and tests. In the lecture method the preparation and delivering of lectures in a central activity. Because of the differences in teacher role there is a resistance to change from lecture to PSI.

In this project we investigate different implementations of PSI as to their teaching effectiveness and teacher- and student-acceptance. In one course a fully computer managed version of PSI is implemented. In another course the lecture method is still used, with a strong emphasis on testing and feedback of test results. Also peer teaching in small groups is incorportated. These two courses have general and applied mechanics as subject matter. Completing the courses takes about two years on a part-time basis. Typically 600-700 students are in the courses at a time. On a smaller scale we investigate the effects of feature of PSI that consume much teacher time, like proctoring.

e. The project method

In the Department of Civil Engineering an experiment with the project method is evaluated. The purpose of the research is:

1. Evaluating whether the objectives of the project work are reached.
2. Evaluating the effect of variation in the following variables: group size, group composition, the nature and complexity of the project subjects, intensity and style of assistance during the project work.
3. Evaluating the appropriateness of the design and organization of the projects. For the research the method of "illuminative evaluation" is used. As a basis for the analysis different information sources are used as well as different instruments: observations, interviews, questionnaires, papers, documents. From these sources material is compiled to "illuminate" the learning milieu of the students and teachers trying to design and implement a new form of instruction. The research project is of a longitudinal nature. One group of students entering the University in a particular year is the research sample. The project work of the group is studied during a number of years.

CATHOLIC UNIVERSITY NIJMEGEN
INSTITUTE FOR RESEARCH AND DEVELOPMENT IN HIGHER EDUCATION
[Instituut voor Onderzoek van het Wetenschappelijk Onderwijs (I.O.W.O.)]
Address: Verlengde Groenestraat 75
6525 EJ Nijmegen
Telephone: 080 - 512470/516201
Managing Director: J.F.M.J. van Hout

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1. Task and activities

The Institute for Research and Development in Higher Education (I.O.W.O.) was established in 1967 by the governing council of the University of Nijmegen. The university offers about 50 study programs, has approximately 2,000 staff members, and an enrollment of about 15,000 students.

The task of the I.O.W.O., generally stated, is to assist in the research and development of innovative educational products which will improve the instruction and the educational environment of Catholic University. These products can deal with instruction, curriculum, or educational administration.

This task demands a close co-operation with the instructors and faculty thus the institute can be characterised as being a service agency. This service can take various forms: giving information about results of educational research, advising various university agencies, assisting improvement programs, developing products and systems (e.g. handbooks for teachers, systems and courseware for computer-based education) performing research, and developing and delivering of special in-service teacher training programs.

I.O.W.O. activities are concentrated on some special areas: course and program evaluation of study results, study effectiveness and environment, study-skills and instructional skills. The previously identified types of service (information, advice, assistance, development, research, and training) apply directly to these special areas.

2. Staff

The current staff of I.O.W.O. consist of eleven permanent associates (primarily educational psychologists/technologists) and two clerical assistants. There is also a temporary staff (variable), responsible for specific tasks or projects.

Within the permanent staff are two subgroups with specific tasks: the Computer-Assisted-Instruction (CAI) Group (3 members), responsible for research and development of computer applications in education; a training group responsible for development and delivery of teacher-training courses.
The permanent staff are the following:

Director: drs. J. van Hout

CAI Group: K. Derks, drs. F. Gastkemper, dr. M. Leiblum

Teaching-Training Group: drs. L. Wolters, A. Horsten (part-time)

Remaining staff: drs. H. Bevers, drs. T. Borgesius, drs. D. Hermans, A. Horsten (part-time), drs. E. Wardenaars, drs. J. Willems.

3. Operating Procedures

Most activities are initiated on request from a faculty, department, special group, or teacher. When this occurs, an analysis of the educational problem is made and the selection of the form of assistance and approach is established. This can often lead to an intensive co-operation with a team of instructors or committee wherein the I.O.W.O. brings in special expertise.
The I.O.W.O. can also start projects on its own initiative, mostly based on seen educational deficiencies. These projects can also take many forms (from informative to direct training programs).

4. Some examples of projects

4.1. PROJECT: Reorganization of the doctoral Program in Developmental Psychology

PERIOD: November 1977 - June 1979.

SETTING: Project with the Department of Developmental Psychology (KUN), requested by that Department.
Activities were performed by a commission of the department, and one I.O.W.O. associate.

PROBLEM: A thorough inquiry into and revision of the doctoral program based on conclusions from formative evaluations, collected during a three year period, on the functioning of the (existing) program.

APPROACH: The commission systematically studied the curriculum; recommended and developed procedures based on a strategy of curriculum development.
Phases:

1. Conceptualization: development of a general plan and statements about the structure of the discipline and training requirements.
2. Setting of primary and secondary objectives.
3. Specifying concrete criteria for the curriculum (form, content).
4. Comparing existing curriculum to criteria specified in 3.
5. Implementation of necessary change proposals.

At the completion of each phase, the commission prepared more concrete proposals for curriculum change (initiation). The prepared materials were brought to the department for confirmation.

RESULTS: A model for "Initiation-Confirmation" is a useful organizational form in curriculum development in a large department.
A workgroup formed from representatives of diverse disciplines is a workable agency to deliver curriculum proposals.
Working, following a developmental strategy, is an adequate way of building-up plans on the basis of evaluative data.

PRODUCTS/PUBLICATIONS:

Het doctoraalprogramma ontwikkelingspsychologie.
Lieshout, C.F.M. van: Voortgangsverslag herorganisatie doctoraalprogramma ontwikkelingspsychologie. Interne uitgave vakgroep ontwikkelingspsychologie. Nijmegen, 1978.

Wardenaar, E.: Curriculumontwikkeling in het universitaire onderwijs. Herorganisatie van het doctoraal-programma ontwikkelingspsychologie, een case study. IOWO-memorandum 24-79. Interne uitgave IOWO. Nijmegen, 1979.

4.2. PROJECT: Development of a teacher training course "Improving Lectures"

PERIOD: January 1976 - June 1979.

SETTING: In 1975, the I.O.W.O. made a start on the development of didactical courses, e.g. to provide in-service training for all KUN instructors on educational/didactic techniques. The 'Improving Lectures' course was one of programs under preparation.

PROBLEM: The training must satisfy the following requirements:
- change in teacher behaviour must be observable. Practice and feedback are necessary.
- the training must be concentrated (require least amount of time).

APPROACH: Co-operation with the Centre for Educational Research and Development (C.D.O.) of the Twente University of Technology in the development of the course.
In Twente an experimental version of the syllabus was written. It was based on a strategy for analysing and improving teaching, developed at the Clinic to Improve University Teaching of Amherst, Massachusetts, USA (1974).
During the period August 1977 - August 1979, the training was given 25 times. Evaluative data was collected during this period, relevant to:
- the effect of the training; by analysing a video tape of an actual lecture by a teacher, analysing data of student-questionnaires and data of observations of lecture one year after training.
- the plan for training; by analysing the opinions of the teachers and of the instructors.

RESULTS: Positive results were reached in the strengthening of teachers ability to structure a lecture course, and to present it. The presentation method is more difficult to

influence than the structuring of a course. Improvements in course structuring seem to have a positive influence on presentation methods. The framework for training was satisfactory. The use of video recording live lectures seemed to be edifying and effective. The demand for the training is great.

PRODUCTS/PUBLICATIONS:

Smuling, E.B. en Van Hout, J.F.M.J.: Geven van Hoorcolleges: een handleiding bij training in doceervaardigheden. Centrum voor Didaktiek en Onderzoek van Onderwijs van de TH-Twente en het Instituut voor Onderzoek van het Wetenschappelijk Onderwijs KU Nijmegen, 1977.

Wolters, L.A.M.M.: Evaluatieverslag docententraining. Het geven van hoorcolleges. Memorandum 12-77. Instituut voor Onderzoek van het Wetenschappelijk Onderwijs KU Nijmegen, 1977.

Wolters, L.A.M.M.: Docententraining Geven van Hoorcolleges; Verslag over de ervaringen met de training in de periode augustus 1977 - augustus 1979. Instituut voor Onderzoek van het Wetenschappelijk Onderwijs KU Nijmegen, 1979.

4.3. PROJECT: CATC: Computer Assisted Test Construction

PERIOD: November 1979 - Early 1981.

SETTING: CATC is a developmental project that was begun on the initiative of the IOWO based on a determined need that existed within several departments. The project was implemented in co-operation with a small group of faculty members.

PROBLEM: The objective of the project was to develop a CATC system that would satisfy the wishes of university teachers and the user evironment. Such a system makes it possible for teachers to generate test from computer-stored test item banks. In a CATC system, questions (items) can be indexed and stored by content or other technical characteristics, and then be selected or retrieved by specifying those characteristics. If one choses to use the system to score tests, than an item analysis is performed through which the quality of items can be evaluated.

APPROACH: The original plan, to modify an existing CATC system, was dropped. It was decided that an entirely new system (which fully satisfied internal requirements) was required.

RESULTS: Not yet known.

PRODUCTS: Development is not yet complete (30 or 50 subprograms have been prepared). The completed programs deal with item bank maintenance, test production, and scoring. Documentation and user guides (for instructors) are under development.

4.4. PROJECT: Development of a Basic Study Skills Course for First Year Theology Students

PERIOD: 1977 - 1979.

SETTING: The course was requested by the study advisor/educational co-ordinator of the Theology Department.

APPROACH: The I.O.W.O. was responsible for complete development, try-out, and evaluation of the course, and also for the production of a student handbook (based on an existing I.O.W.O. study guide for Arts & Humanities), and a teacher's guide. The I.O.W.O. also provided training for prospective course teachers.

RESULTS: The primary objective was to make students more aware of their faculty study habits. This objective was reached by between 80-90% of students (determined via a questionnaire). The secondary objective was to allow students to gain practice with better study methods. Based on the results of a questionnaire it appeared that between 40-60% of the students made use of improved study methods. Current Status: The course is a required part of the curriculum for first year students. Teachers must gain the skills necessary to give the course. The educational co-ordinator organizes the course. The Theology faculty is fully responsible for the course: the task of the I.O.W.O. is completed.

PRODUCTS/PUBLICATIONS:

Jongepier, P.: Handleiding bij de basicursus studievaardigheden t.b.v. theologie. IOWO-rapport, Instituut voor Onderzoek van het Wetenschappelijk Onderwijs, KU Nijmegen, 1979.

Jongepier, P.: Handleiding voor trainers van de basiscursus studievaardigheden bij theologie 1979/1980. IOWO-memorandum 25-79, Instituut voor Onderzoek van het Wetenschappelijk Onderwijs, KU Nijmegen, 1979.

Jongepier, P.: Evaluatie van de basiscursus studievaardigheden bij theologie, 1979/1980. Instituut voor Onderzoek van het Wetenschappelijk Onderwijs, KU Nijmegen, 1980.

4.5. PROJECT: Computer Assisted Instruction and Mathematical Group Theory, 2nd year students, Algebra II course

PERIOD: 1979 - 1981.

SETTING: A co-operative project between the Mathematics Institute and the CAI group of Catholic University Nijmegen.

PROBLEM: The primary objectives of this project were for the Mathematics Institute to:

- gain actual CAI development and operational experience
- provide automated tutorial instruction for a limited subset of a second year Algebra Course thus allowing instructors to initiate lectures on more advanced materials
- provide a limited number of guided problem solving exercises, and simulation capabilities leading to a general problem solving procedure dealing with group theory
- ensure that all students reach minimal entry level of knowledge on topics to be covered
- determine staff/student attitudes towards CAI medium.

APPROACH: Tutorial and simulation programs were developed co-operatively with mathematics institute providing content expertise, CAI group assisting with didactical, programming, and evaluative procedures. Completed materials went through a test/revision process and formative evaluation, were used by more than 100 students. Performance data were recorded and partially evaluated. Questionnaires were used for obtaining student attitude data, staff were interviewed and held departmental discussions. No formal research design was used because of the pilot nature of the project.

RESULTS: Development and operational CAI experience was gained. Tutorial (CAI) program development and use allowed instructors to initiate lectures at a more advanced level. Problem solving and simulation type programs were developed but no information is yet available about their effectivity in promoting problem solving performance. Performance records show that minimum entry performance levels were met. Staff and student attitutde towards the medium was positive.

PRODUCTS/PUBLICATIONS:

Two tutorial programs dealing with basic group theory concepts.

Eight completed but not fully tested programs providing simulation and inductive learning experiences.

Leiblum, M.D.: Interim Report: Mathematics Institute CAI Project, Instituut voor Onderzoek van het Wetenschappelijk Onderwijs, KU Nijmegen, 1979.

4.6. PROJECT: Integration of a Video Long Play (VLP) Disk within a system for Computer-Assisted-Instruction (CAI)

PERIOD: Phase 1: December 1979 - December 1980.

SETTING: A co-operative project between the CAI Group of KUN, the Computer Science Department of the Delft University of Technology, and the Departments of Work and Organisation, Computing, of the sub-faculty Psychology, KU Nijmegen. Philips Research Labs also provide instrumental support (VLP disk).

The project concerns an observation training for 3rd year psychology students, and is a part of basic-skills curriculum.

LEARNING OBJECTIVES:

To differentiate and identify characteristics of non-verbal behaviours.

To classify non-verbal relationships based on the Leary Model.

PROJECT OBJECTIVES:

To stimulate learning activities (as identified above) making minimal use of instructor support.

To obtain operational experience with a video disk for CAI applications.

APPROACH: Developing cognitive skills in the previously identified area requires practice and directed feedback and realistic/natural learning materials. Until now, training was provided to students in the form of group discussion based on viewing video-taped sessions. The discussion was led by a teacher or student assistant. To limit non-task related discussions between students, an to reduce the intensive support required from assistants, a CAI program was developed. This program incorporated video-taped segments transferred to a videodisk. Students could gain practice either under program or user control.

RESULTS: An interface between the available computer system and the VLP was developed and tested. A CAI program was developed and implemented including control over a VLP.

PROGRESS: The program was used during the months October through December 1980 by more than 100 students. A preliminary evaluation of the technical equipment (hardware) and educational materials (courseware) is underway. Separate reports will be prepared regarding both system components (hardware and courseware). If positive results are attained, then further development (at least technical) will take place.

PRODUCTS/PUBLICATIONS:

An interface between the Philips/Magnavox VLP and DEC/PDP Computer.

A CAI program written in PLANIT/CAIASCO.

Gastkemper, F.H.D.: Geïntegreerd gebruik van CAI en VLP voor observatietraining van psychologiestudenten: opzet. IOWO-memorandum 21-79, Instituut voor Onderzoek van het Wetenschappelijk Onderwijs, KU Nijmegen, 1979.

Gastkemper, F.H.D.: CAI at Nijmegen University: Motive, Means and Opportunity; Short Project Report for the ADCIS Conference, Washington, 1980. Instituut voor Onderzoek van het Wetenschappelijk Onderwijs, KU Nijmegen, 1980 (not published).

5. Some publications

5.1. In English language

DOUSMA, T.J., J.F.M.J. VAN HOUT, C.E. HUPKENS, L.A.M.M. WOLTERS: The training of university teachers at the Institute for Research and Development in Higher Education (IOWO). Summary for use in the workshop on Teacher Training in Bergen (Norway). IOWO-memorandum 28-78, 1978.

HERMANS, B.M.J.: Student and system: academic success and study-problems in relation with characteristics of the academic environment and of the students. Paper presented at the Third International Congress of the European Association for Reseach Development in Higher Education, Klagenfurt, 1979. IOWO-memorandum 45-78, 1978.

LEIBLUM, M.D.: A pragmatic approach to initiating a CAI-service and some problems involved. Programmed learning and educational technology 1977, 14 (3).

LEIBLUM, M.D.: Organizational structuring of CAI agencies: a review. J.C.B.I., 1978, 4 (2), 48-53.

LEIBLUM, M.D.: Screening for CAL, Computer & Automation, Vol. 3, no. 4, 313-323, Pergamon Press Ltd. 1979.

WILLEMS, J.H.H.M.: Problem-based (group) teaching: a cognitive science approach to using available knowledge. Instructional Science, (in voorbereiding).

5.2. In Dutch language

BEVERS, J.A.A.M. en L.A.M.M. WOLTERS: Verslag van een inventarisatie van problemen en behoeften aan onderwijskundige informatie en/of training bij docerend personeel aan de KU. IOWO-rapport 1976.

BORGZSIUS, T.G.: Een empirisch onderzoek naar het correctie voor raden scoringssysteem. IOWO-rapport, 1978.

DOUSMA, T.J. en L.A.M.M. WOLTERS: Onderwijskundige professionalisering van docenten aan de KUN, projectverslag. IOWO, 1979.

DOUSMA, T.J. en A.T.M. HORSTEN: Tentamineren, Spectrum Utrecht, 1980.

GASTKEMPER, F.H.D.: Projectverslag CAI: achtergrond, ervaringen, ontwikkelingen. IOWO-rapport 1977.

VAN HOUT, J.F.M.J., M. MIRANDE, E.B. SMULING: Geven van Hoorcolleges. Spectrum Utrecht (in press).

JONGEPIER, P.: Handleiding bij de basiscursus studievaardigheden bij Politicologie. IOWO-rapport 1980.

WARDENAAR, E. en J.M.H.M. WILLEMS (ed.): Zelfstudie in het Hoger Onderwijs, IOWO-brochurereeks, 1980.

WILLEMS, J.M.H.M.: Probleemgeoriënteerd (groeps)onderwijs: een methode om kennis te laten funktioneren. IOWO-rapport 1978.

WILLEMS, J. en L.A.M.M. WOLTERS: Kiezen van didactische werkvormen. Spectrum Utrecht, 1980.

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ERASMUS UNIVERSITY ROTTERDAM (E.U.R.)
INTERFACULTY WORKING-GROUP OF EDUCATIONAL RESEARCH
(Interfacultaire Werkgroep Onderwijs-Research)
Address: Postbus 1738
3000 DR Rotterdam
Telephone: 010 - 635029
Managing Director: Prof. C.F. van der Klauw

Personnel of the Interfaculty Working-group of Educational Research can be divided into two categories: scientific and administrative. Scientific: 1 professor and 9 academics, of which two with a temporary appointment. Administrative: two secretaries both on part-time basis.

1. <u>The Organization of Educational Research at the Erasmus University Rotterdam</u>

   There are departments of Educational Research both in the Faculty of Medicine and in the Faculty of Economics. Owing to article 18 of the WUB* these departments form together an Interfaculty Working-Group (I.W.G.). The I.W.G. is in fact the organizational unit by which concerted actions aimed at the improvement of university teaching can take place.

   The professor of Educational Research in Higher Education has been appointed as a professor to each of the 5 faculties of the E.U.R. He is chairman of the departments and the Interfaculty Working-Group.

   On financial and personnel matters there is a direct connection between the Board of Directors of the University and the I.W.G. This implies that the faculties have no control on the use of the budget and personnel. Those are directly handed to the I.W.G. by the Board of Directors, after consultation with the faculties.

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* WUB (= Wet Universitaire Bestuurshervorming) is a higher education act, settling the administration and organization of the universities

The Departments of Educational Research and the Interfaculty Working-Group render account to their Faculty Councils. An attending committee (Interfaculty Attending Committee of Educational Research), consisting of the presidents of the permanent educational committees of all the faculties, is consulted on the activities of the department and the I.W.G.

2. Functions and tasks

It is the general function of the Interfaculty Working-Group to contribute to the improvement and innovation of the university education in Rotterdam on the basis of research of their own or on the results of research from elsewhere, as well as the development of educational theories into higher education.

This general function can be specified in four aspects:

a. Increasing the effectiveness of education.
   This means that the I.W.G. helps to achieve educational objectives. This is being realized by e.g. investigating the bottlenecks and problems of the educational system, investigation of the aims, development of educational models and systems, improvement of assessment procedures and methods and in-service teacher training to improve teaching abilities.
b. Increasing the efficiency of education.
   Here the contribution of the I.W.G. is to allocate the proper educational means to the aimed educational objectives. This contribution is getting more and more important now that finances for higher education are no more growing, whereas the number of students is still increasing.
c. Support of the introduction of new legal regulations in university practices e.g. re-organization of curricula, changing of functions of the propaedeutic exam, design and implementation of new disciplines (history of societies, general health care).
d. Development of the field of educational research into higher education.
   This means the development of educational theories, models and instruments, research on relations between educational variables, analysis of educational problems and the development of teaching instruments and methods.

These functions are being realized in the following activities:

A. Developmental and evaluative projects constitute the most important of the activities of the I.W.G. In these projects we try to gain a clear diagnosis of the problem by approaching it (analytically) from an educational, logical, subject matter and organizational point of view. Depending on the nature of the diagnosis we then will try to find a solution to the problem. Usually a diagnosis of an evaluative character ends up into conclusions and/or proposals to improve (parts of) the educational system. Sometimes the conclusions are followed by the design and construction of a possible solution, the implementation of the solution and the evaluation of its success.

   Involvement in a developmental and evaluative project often has consequences that are not strictly related to the subject-field of the project. By chosing a project strategically such experience can be gained as will be useful for decision-making in other fields. However, investment of time in projects like these is high. Besides, changes in a university during the course of an investigation may reduce the opportunities to gain good results, e.g. a question that a project has got to answer, changes as a consequence of a change in a faculty's priorities.

B. Participation in committees and working-groups is another way in which the I.W.G. works on the improvement of education. Being a member or a consultant to the educational committees and/or working-groups appears to be useful for the I.W.G. as well as for the faculties. Participation of the I.W.G. in these committees serves two ends. On the one hand the I.W.G. advises the committee on educational matters, on the other hand the committee provides the I.W.G. with information on the faculty's policies and problems. Many projects resulted from discussions in such committees.

C. Frequently short advices are given to groups of teachers or individuals within the university. If an individual question seems to have implications for other parts of the educational system we try to generalize the advices in small reports. However, there will always

remain the clear demands for informal and oral consults too. This kind of service is considered to be necessary and useful, because the teacher is helped out by a concrete improvement of his/her teaching. Besides such an activity often is the first step to further improvement, which had not been asked for at the beginning. Finally, a good relationship with the teachers is crucial. If they get to know what the educational researcher has got to offer, they will certainly and easier come back another time.

D. Teacher training courses have existed for quite some time, but they have been rendered a higher priority for one and a half year now on request of several bodies within the E.U.R. For the I.W.G. teacher training courses means: conferences and workshops aimed at increasing educational expertise of the E.U.R. staff. Course subjects are: basic courses in university teaching, lecturing, examination and test construction, construction of written patient simulations, working in groups, etc. Some of the courses are given on request, others on the initiative of the I.W.G. herself. Most of the courses are of an open character, which means they are accessible to every E.U.R. staff member. A few are of a selective kind. They are mostly specialized courses meant for a smaller group of teachers to improve their own teaching procedures and practices.

E. The I.W.G. does research of two kinds. The first one is decision-oriented. Here research aims directly at the improvement of teaching at the E.U.R. Research in this sense is a means e.g. to analyse problems in courses or curricula within the university, to let daylight on decisions, decision alternatives and their implications, or it is an instrument in course development and evaluation.

The I.W.G. also does research of another kind. This research is aimed at the development of educational theory and educational technology in a more general sense. While doing this kind of research it is not yet clear whether it will result in any conclusions applicable to E.U.R. educational situations. However, the subjects for this research are chosen in such a way as they may be expected to pay off in the long run with regard to the improvement of E.U.R. education.

An example is an investigation into the methods for self-regulated study behaviour.

F. Teaching graduate students and PhD-candidates.
The I.W.G. is involved in student teaching as far as it concerns electives in the field of educational research into higher education and adult teaching, probation terms and Masters' assignments. Under supervision of the professor a number of PhD-candidates do their research on problem solving, study behavior and study methods and course evaluation.

3. Projects

Redesign and Evaluation of a Course in Gynaecology and Obstetrics

Junior clerkships are intended to be a bridge between the first and second part of the medical curriculum at the E.U.R. The first part of the curriculum (7 semesters) basic and clinical sciences are taught by means of lectures and practical laboratory work. The second part of the curriculum (3 semesters) consists of socalled senior clerkships. In this part of the curriculum students get their practical training in medicine. The junior clerkship (2 semesters) is therefore a mixture of theory and practice: helping the student to make use of his knowledge in practical medical problems and teaching him some basic clinical skills. The course in gynaecology and obstetrics lasts six weeks during those junior clerkships.

The Department of Gynaecology and Obstetrics decided to redesign its course because of the inadequacy of the contents and teaching methods used. A project group of this department and two members of the Department of Educational Research in the Medical Faculty carried out a problem analysis of the existing program. The main objectives for change appeared to be:
- a better orientation towards the needs of the general practitioner
- switching the content oriented course to a problem oriented course
- introduction of new topics: e.q. abortion, sexual problems, emotional problems

- providing specific support to the teachers in order to facilitate their teaching task.

By means of interviews with general practitioners and members of the Department of Gynaecology and Obstetrics the project group got a clear picture of frequent gynaecological and obstetrical symptoms, signs and deseases and the way in which those problems were solved.

An analysis and reorganization of the subject matter followed. The subject matter of obstetrics has been organized according to the development of normal pregnancy.

The subject matter of obstetrics follows the development of normal pregnancy. The emphasis is on the relevant features: symptoms and signs to diagnose pregnancy, second and third trimester of pregnancy and delivery and childbed.

The subject matter of gynaecology has been organized according to six frequently occorring complaints: abdominal and lower back complaints, abnormal bleeding, incontinence and prolapse, fluor and vulva complaints, fertility disturbances and family planning.

The newly designed course is characterized by:
- a program of six weeks divided into three periods of two weeks. Each period ends with a test of progress. All three tests must be passed in order to finish the course.
- individual self-study is combined with group meetings and practical work. The subject matter is individually studied in modules. The self study is supported by a study guide and by exercises. In the group meetings teacher and students discuss experiences and problems of the individual study and together they apply the recently acquired knowledge to written case histories. The function of the meetings is to motivate students to study, to correct their study methods and to detect gaps in knowledge and skills. Also a programme was mapped out for work and visits in the hospital.

The learning principles applied are:

- activation of prior knowledge of the students. Students must have the opportunity to link up prior and new knowledge. In the newly designed course prior knowledge is activated by audio-visual programs and by information in the students' study-guide.
- production of organizers as a help for students in studying and replicating the content. The organizers are inserted in the study guide.
- studying, and afterwards practicing the required subject matter in representative case histories. In the study guide students can read what they should study next week (the relevant chapters of the handbook of gynaecology and obstetrics), the available audio visual programs (videotapes, slides), the case histories to which this knowledge and skills can be applied and the multiple choice questions to test their knowledge. Case histories and multiple choice questions are assembled into a workbook.
- written and verbal feedback is given to the students. In the workbook feedback is given by detailed accounts of solutions of case histories and by the answers to the multiple choice questions. Furthermore written feedback is given by the solution of patient management problems. Verbal feedback takes place at the group meetings of teacher and students by discussing the problems of the subject matter, the exercises in the workbook of last week, during the solution of written medical cases and finally during their clinical work in the hospitals (e.g. history taking and physical examination).
- identifying lacks in knowledge and skills. As soon as lacks become clear students are advised to study the subject matter once again. Following the advice is their own responsibility.
- regular testing of the students' knowledge and skills. The course has, as explained above, three final tests, one every two weeks. A test consists of 30 multiple choice questions on the subject matter to be known, about 15 multiple choice questions on a case history and one patient management problem.

To support the teachers in their new role the project team has written a detailed teachers' guide. The teachers have received a training in the solving of case histories in interaction with the students at the group

meetings. During this three days' training teachers learned to constantly demonstrate the link between the necessary knowledge of the physician, the process activities and the products of the problem solving process.

The selected education methods and media were tested before incorporating into the coruse. There have been three evaluation experiments. In the first experiment prototypes of methods and media were tried out. The intention of the second experiment was testing the designed methods and media. In the third experiment the complete course and its educational effect on the students following the courese were evaluated.

Evaluation of Medical Specialist Training Guidelines in the Netherlands

In the Netherlands the training of medical specialists is based on guidelines, settled by a national licensing board. On account of this board the Department of Educational Research of the Medical Faculty of Rotterdam is evaluating these guidelines. Goal of the evaluation is to adapt the guidelines to structural changes in the educational and health care environment. To reach this goal, the evaluation is divided into the following steps:

1. description of the existing structure of the training organization and of the training guidelines. The description is extended with an analysis of the environmental characteristics that correspond to the characteristics of the guidelines.
2. description of the current educational and health care environment of the training organization. This description is extended with an analysis of the differences between the existing environmental characteristics and the characteristics the guidelines are based on.
3. description of the discrepancies between the characteristics of the training guidelines and the current environmental characteristics. In this description is shown which negative effects these discrepancies have on the effectivenes of the training process and what reactions in the training organization can be observed, directed to guideline changes.

4. development of proposals for guideline changes that can minimize the described discrepancies. For each proposal the organizational, personal and financial consequences are worked out.

The project started in August 1979 and will end in January 1982. For further information you may contact Drs. A.A. de Roo.

Redesing and Evaluation of the Junior Clerkship in Paediatrics

One of the improvements of this junior clerkship was the introduction of the training of interviewing skills by means of training mothers. These socalled simulated mothers are trained to simulate the role of the mother of a sick child and to give feedback on the performance of the students.

Redesign and Evaluation of the Junior Clerkship in Psychiatry

The project, which started in September 1980, is in the phase of problem analysis. The project is planned to end in September 1982. For further information you may contact Drs. R.J. Faber.

Evaluation of the Tutorial System in the Faculty of Law

During the first and second year of the law curriculum at the E.U.R. students have the opportunity to work in small tutorial groups. Groups of 10-12 students with one senior student as a tutor meet twice a week for two hours. They discuss law cases, law problems, perform small projects or write essays. The Interfaculty Working-group of Edcational Research was asked by the Faculty to evaluate the tutorial system. This evaluation took several years. A number of reports has been written. The final report was published in December 1979; the authors are Prof. C.F. van der Klauw and Drs. J. Nedermeijer.

Teacher Evaluation by Student Ratings in the Faculty of Social Sciences

The purpose of this project is to develop a pool of items by which teacher behaviour can be rated. After some time teachers should be able

to choose their own items by which their teaching can be evaluated by students. The first report in this project was published; title: Docentenbeoordeling (Teacher Evaluation); author: H. van der Vleugel.

Individualized Study System

In the Faculty of Economis an Individualized Study System is being developed on Macro and Monetary Economics. One of the main educational problems of the Faculty of Economics is the large number of students. Every year about 800 freshmen are registered. Owing to this too many students must follow the same lectures. It happened several times that lectures were given for more than 800 students at the same time. Feedback is hardly given in time. The purpose of this I.S.S. project is to do something about the present way of teaching so many students at the same time, to give students feedback on their study in time and to try and have students work together more regularly than happened until now.
For further information please contact Drs. H. van der Vleugel.

Study Skills and Study Methods

Empirical research is done after study behaviour of students in general and especially after the way in which students can regulate and control their own study behaviour. This concerns arranging of time, planning of the study, concentration and perseverance. On account of empirical information we wish to develop a study method containing advices about self regulation and control of study behaviour.
For further information you may contact Prof. C.F. van der Klauw.

LUDWIG HUBER, HAMBURG

HOW MANY UNIVERSITY TEACHERS LEARN TO IMPROVE THEIR TEACHING METHODS?

International seminar on vocational training for university teachers in Hamburg - Haus Rissen, 28th April - 2nd May 1980.

Reforms in further education, which are the continual task of universities and an even more constant topic of discussion, will only achieve their aim if the realities of individual lectures and study activities change: it is indeed important to revise exam systems and forms of study now that so much attention is directed towards them (in the Federal Republic e.s. by the "Hochschulrahmengesetz" and the work of the "Studienformkommissionen"; and possibly even more relevant are the other framework conditions of teaching and studying (whether personal or financial or accomodation problems etc.). But the decisive point in the end is how students and university teachers actually organize the teaching and learning processes.

Thus we come to the question: how can university teachers learn to improve their teaching methods? And the idea of some form of vocational training in didactics for university teachers seems all the more pertinent since, as we know, they do not receive or have to prove - at least in West Germany - any kind of introduction to, or indeed training in, didactics. On the contrary, they develop their teaching methods solely from their own experience whilst studying or experience as an assistant, and at best from the response of their own students. Vocational training in university didactics has therefore already been soundly institutionalized in a number of other countries for many years, and is offered by "units" or "centres" introduced for that purpose under such names as "Faculty Development" or even "Hochschulpädagogische Ausbildung"; and university teachers, particularly those just starting up, are put under a more or less gentle pressure to make use of these facilities.[1] Over the last 5 years nearly all university teaching

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1) For a more comprehensive survey see L. Huber (ed.): Hochschuldidaktische Fortbildung von Hochschullehrern. Hamburg 1980 (Hochschuldidaktische Arbeitspapiere, edited by the Interdisziplinäres Zentrum für Hochschuldidaktik, H. 12).

centres in West Germany have offered and developed appropriate seminars or courses, and two of these development programmes have been sponsored as model experiments by the "Bund-Länder-Kommission", and evaluated accordingly (Freie Universität Berlin and Ruhr-Universität Bochum) - and all of this has been with a varied but on the whole low response, considering the number of university teachers potentially concerned.

The introduction and formation of such activities in vocational training produces in addition a large number of problems which our small workshops can hardly solve alone.

To further the exchange of ideas and mutual practical study of methods of approach, experiences and aims in this field of work, an international "Workshop on Staff Development" was set up in Haus Rissen under the aegis of the European Association for Research and Development in Higher Education (EARDHE) and the "Arbeitsgemeinschaft für Hochschuldidaktik" (AHD). It was prepared by Brigitte Berendt (Arbeidsstelle hochschuldidaktische Fortbildung und Beratung, FU Berlin), David Warren Piper (University Teaching Methods Unit, London) and Ludwig Huber (Interdisziplinäres Zentrum für Hochschuldidaktik, Hamburg) and organized by the latter in Haus Rissen. 25 "Hochschuldidaktiker" (as they are called here) from 9 countries (Canada, Great Britain, Holland, Norway, Finland, Switzerland, Austria, Yugoslavia, West Germany) took part, presented the materials they employ, demonstrated particular practical learning situations from their courses, and discussed the aims and theories upon which their approach in teacher training is based.

As a continuation and supplement to the two previous seminars of this kind (Bad Homburg, 1977; Maidstone, Kent, 1978) the work this time was to concentrate on studying and discussing the "materials": the curricula, course planning, films, introductory books or texts, excerpts, leaflets, questionnaires, etc. But only with difficulty could this plan prevail against the fascination of more direct communication with colleagues who faced such similar tasks and problems. Four study groups dealt in particular with the themes:

- "Introductory courses" (in didactic problems in universities) as a basic component of further education provisions in all centres or workshops (led by: Ludwig Huber)
- "Course development" (planning of lectures) as the object of more concentrated vocational training and more intensive advice (David Warren Piper)
- "Material for self-instruction" (about university teaching methods for university teachers) as a possible supplement to actual "attendance" courses (Lewis Elton)
- Curricula (long term courses) as an attempt at going beyond one-time compact seminars to achieve a form of continual study in university didactics (Brigitte Berendt).

We should like to show by a selection of results - which are of course influenced by the view of the person reporting - what could be learned in this seminar, especially through the confrontation with others, about these problems which are essentially similar though they may contain different answers from country to country, from institution to institution.

In describing the introductory course for example the most important problems emerge with pleasing unanimity as "basic problems of teaching and learning or rather study situations", "planning and performing lessons", "communication and interaction (aspects of group dynamics)" and "evaluation of lectures"; and two of the standard methods of dealing with these problems emerge as "simulating lessons" and "role playing". But the appearnace of complete agreement is deceiving:
The following role game: "session of a commission to decide whether to promote (exam results, further enrolment as a student) or dismiss a student" can be used for several purposes: either to discuss the extent of the background circumstances to be actually included in assessing a student's performance; or the problems of interaction between commission members with varying views and hierarchical positions; or the methods of management and organization of the session. And a simulated lesson recorded with video and a subsequent discussion can also have a multiple purpose: either to encourage the university teachers participating to take up the role of a student again and to make and exchange experiences thereby; or to evaluate and improve the behaviour of the respective lecturer; or finally to bring to light the conscious or unconscious

assumptions and intentions about learning processes upon which their lessons are based and thus make them comprehensible. And accordingly the simulation can be quite different in its preparation, length and value. In turn these differences have led us of necessity to a discussion of the premises upon which our own approach is based; and indeed vast differences can be seen here:

- between the views that university teachers are like any other teachers and should have some form of teacher's training, or the view that they should have some help in improving their teaching methods, but that university courses should not become completely pedagogical or an extended form of school;
- between methods of approach which aim above all at behaviour training and perhaps sensibility to processes in group dynamics, and other approaches which aim at clarifying the connection between structural content and study structure;
- finally in the positional value given - in higher education courses - to verbal learning, learning through personal experience, or learning also from emotionally significant experiences, e.g. through self-confrontation.

The same questions and discoveries are of course repeated on a larger scale when considering the development of a more long-term course of study in vocational training, considering, that is, a "curriculum". At the moment this is only being attempted in England, where regular postgraduate studies (Diploma Courses) in Higher Education are offered and effected by two groups; whereas the German Centres are at most concerned with proving and substantiating the position of their à la carte provisions within a broader conceptual framework and recommending certain combinations between them. In this country it is considered neither meaningful nor is it intended to consider "compulsory participation" (contrary, for example, to the proposals for a framework for academic teaching qualifications in Austria). The main problem is posed by the question of how, in the light of their other duties and engangements, the university teachers can hope to achieve some kind of long-term benefits and continuity in their didactic training for university and from systematic work in teaching methods in between their various seminars - for instance in the form of group sessions, reciprocal invitations or supvervision.

Despite scepticism - at least on the part of the writer - one must, however, recognise as a further result of the workshop, that the socalled materials for self-instruction could adopt a certain function in this respect. Experiences with such materials have been collected in Amsterdam, Essen and Guildford, where they have attempted an introduction to university didactics as free from jargon as possible, and have combined this with tasks and suggestions for further work; and this was sent to all interested teachers at the respective universities. According to these experiments it seems possible to raise the interest of university teachers and even professors who do not initially attend seminars or study groups for whatever reasons or considerations they may have, and of those who have been attracted in this way to win over some for more intensive joint study in projects in university teaching methods.

In such projects only university teacher training can have institutionally relevant consequences going beyond more individual changes in behaviour. Amongst many other things they are continually concerned with developing new concepts or plans for lectures. With this in mind let us point out a final example of the immediate experience from this seminar. It is all too plain for the trainer treating the theme "course planning" to become involved in a systematic presentation of the elements of the curriculum (aims, contents, methods/media, etc.); and continue with, under certain circumstances, long-drawn-out normative discussions about the study aims; but the aim strived for could be achieved far more quickly and intensively, as shown by a report from London, if the teachers participating are confronted e.g. with students' work and their own varied marking of these pieces of work, or with the differing representations they themselves give of the framework of initial conditions for their teaching methods - both of which inevitably lead to scientifically theoretical and didactic discussions.

Thus even in this field the international exchange has significance in encouraging or comforting the small troop "Hochschuldidaktiker" through some insight into their mutual problems, and thereby stimulates further work. The fact that the business of training for university teachers is not completely matter of course and unproblematical was pointed out at

the beginning by a quotation from the Paulsen[2]:

> "Even greater than those against the theory of university pedagogy are my doubts about the planned practical lecture course, the 'seminar for university teachers'. It seems to me that even the name has something strange, even comical about it, provoking neverending further education: seminar for teachers conducting a seminar for university teachers, and so on ad infinitum: teachers who teach teachers how the art of teaching in a seminar for university teachers should be taught. Somewhere the thing will have to stop."

However, it is not a question of this frightening pyramid construction, but of the promotion or restoration of communication and co-operation amongst university teachers - for whom the instructors of the teachers should only, if need be, act as catalysts - in questions of teaching, and with a view to the educational reforms mentioned at the beginning.

The particular interest of the University of Hamburg in the furtherence of this educational reform and work in university didactics was strongly emphasised by the vice-president, Prof.Dr. Glashoff at a reception for the participants. In his reply Prof. Lewis Elton compared university didactics with the sparkling bubble in a glass of sekt: tiny in comparison to the surroundig mass of the university, always in danger of disappearing completely, but very important for the pleasant prickly sensation of the whole .....

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2) F. Paulsen: Die deutschen Universitäten und das Universitätsstudium. Berlin: 1902 (!).

ANNOUNCEMENT

There will be an International Conference, sponsored by the university of Bradford, from 13-17 July 1981. The Conference, entitled "Intercultural Issues: The Third Annual Conference and Work-Shop", is promoted jointly by the University of Bradford and SIETAR: Europe. Further information may be obtained from:

Dr. G.K. Verma, Senior Lecturer
School of Research in Education
University of Bradford
BRADFORD, West Yorkshire, BD7 1DP.

A NEWSLETTER TO FACILITATE STAFF DEVELOPMENT

Teaching News - the newsletter of the Educational Development Advisory Committee of the University of Birmingham - is published once a term. The purpose is to provide information on developments in course design, teaching methods and techniques of assessment and to promote the exchange of ideas on teaching among members of staff. Most articles are in the region of 300 - 900 words and each issue generally includes reports of innovations and developments in university teaching, suggestions for improving students' learning techniques, reviews of books and recent articles, critical reports of meetings attended and a correspondence column.

Each number of the academic staff at Birmingham receives a copy of Teaching News and an increasing number - currently about 500 - are sent to colleagues in other institutions both in the U.K. and overseas. If you would like to be added to the circulation list - there is no charge at the moment - please write to Dr. R.J.D. Rutherford, Faculty of Education, University of Birmingham, Birmingham B15 2TT.

UNIVERSITY OF SURREY

INSTITUTE FOR EDUCATIONAL TECHNOLOGY

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1. Courses

The Institute provides the following courses:

a. Teaching and Learning in Higher Education Course

The Institute (jointly with the University of Kent), offers an annual eight-day course in Teaching and Learning in Higher Education, each September. This course regularly has several European participants and on one occasion was offered specially for an international group from Sweden, Netherlands and Britain.

b. City/Hatfield/Surrey Postgraduate Diploma and University of Surrey MSc in Teaching and Learning in Higher Education

City University, Hatfield Polytechnic and the Universityy of Surrey offer jointly a five-term part-time course leading to postgraduate diploma in Teaching and Learning in Higher Education. Students who obtain the diploma at an adequate level may proceed to the MSc, which is based on a dissertation which links students' study on the diploma course to their own practical experience. (Next entry January 1982). The Diploma course meets every Wednesday in term time at City University in London. We have never had members on it from abroad, but would be interested to hear from possible applicants. The MSc is supervised entirely by staff from the University of Surrey.

c. Diploma in the Practice of Higher Education

This course, which is being developed for teachers in institutions of higher education in South East Asia, will be taught at a distance through specially prepared materials, with support provided by tutors in study centres in local universities. It is hoped to provide a residantial seminar in South East Asia annually to enrich the course members' experience. The course is based on earlier work conducted jointly with Dr. Gaye Manwaring of Dundee College of Education. Although this course is at present available only in South East Asia, it is hoped to extend it in due course to other countries.

d. Research Training

The Institute accepts students for full-time, part-time and collaborative research, leading to MPhil and PhD degrees of the University of Surrey.

2. Visitors' Programme

a. Sabbatical Leave

The Institute offers a number of places to staff on sabbatical leave from other Institutions in this country and abroad.

b. Visitors' Days

The Institute has regular Visitors' Days, at least once a term. As these are arranged with individual visitors' interests and needs in mind, it is important that intending visitors should explain these when writing to the Institute.

3. Further Information on the Institute

A full account of the work of the Institute can be found in the European Journal of Science Education, Vol. 3 (1980) pp. 333-337. Further details can be obtained by writing to:

Diane Gray
Institute for Educational Technology
University of Surrey
GUILDFORD, Surrey GU2 5XH

Telephone Guildford (0483) 71281 extension 619/402.

Miss Gray will be pleased to supply a Publications List and make arrangements for visits to the Institute.